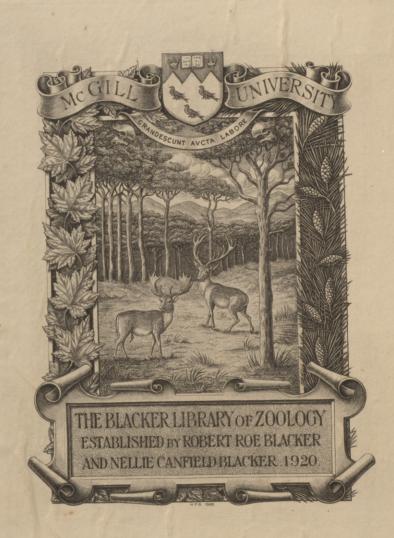


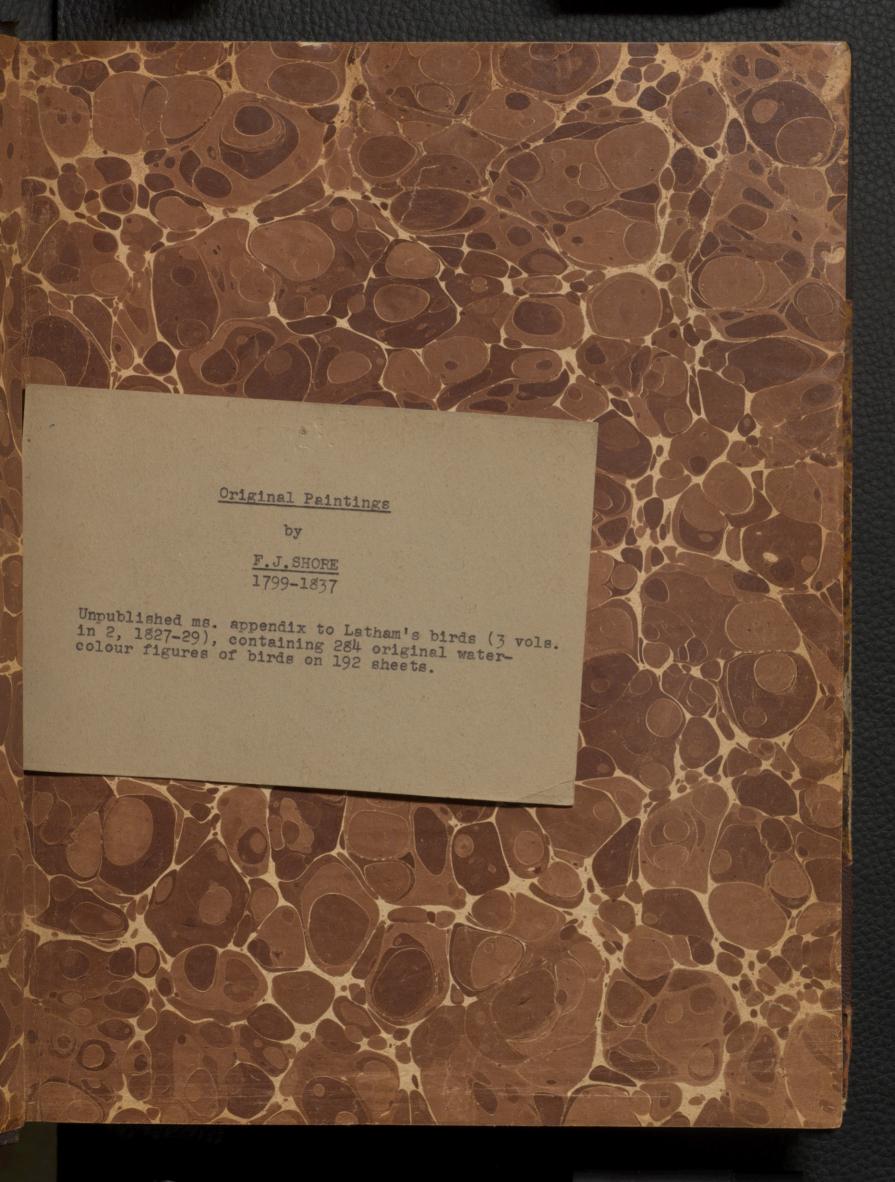
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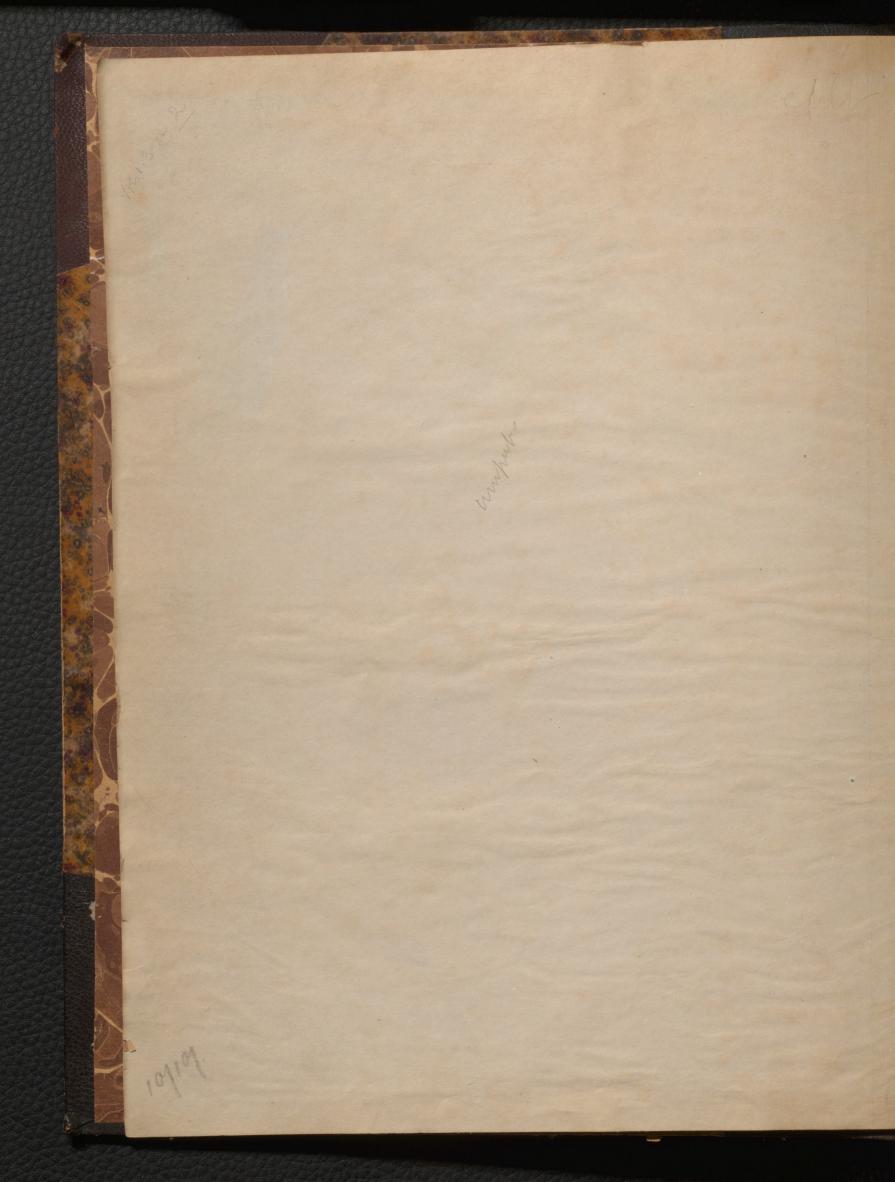
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Commenced May 10. 1827.

APPENDIX

to

Latham's Birds

Vol. I

In this index the Orders are and in Lathams. The different Jenera, divided into families are put down alphabetically for convenience of reference. The English names are used, as there seemed to be no certainty in the Classical names adopted. To some there are none. (A great devideratum to have the birds classically arranged, with significant names, and the descriptions in Latin, as one nation would then understand and there work.) The Numbers on the left hand refer to the genera in Lathanis. The numbers of the plates refer also to Lathanis. []. Shore

Order 1. Rapacions. Accipiter

Bill incurvated, the upper mandible hooked, with an indentation near the tip. Nostrils for the most part open. Feet made for perching, short, strong. Body, Kead & Neck muscular. Skin thick: Hesh impure. Food obtained by rapine, or preying on earnion. Nest built on trees, or clevated places. Eggs generally four. Temale larger. Monogamon.

Senus Falcon Falco. When I have and furnished with a wary skin at the base, called the Core, in which the nostrils are placed. Tongue bifid at the ond. Head and neck furnished with feathers. Legs and feet scaly for the most part, middle toe connected to the outmost, as far as the first joint, by a strong membrane. Claws large, much hooked, and very sharp, that of the outer toe at least. The female larger and stronger than the male.

felts 8.9.10.11.12

The bill is crooked, but rurely furnished with a core. Northils oblong; cornered with bristly feathers. Head large, the usual opening of the ears very spaceous. Eyes large tongue bifed. Foes places three before and one behind; the outer one capable of being occasionally turned backwards. The external edge of one or more, of the greater quells servated in most of the species.

pl. 13, 14, 15, 16, 17

2 Secretary. Secretarius.

Genetarius. 1" 38 1 Gypogeranus.

Bill shorter than the head. hoshed, base covered with a cere. Nostrils in the love, near the base, open. Bound the eyes, base of feathers. At the bend of the wing two or more homy knobs, or blunt spurs. Legs very long, toes moderate, united at the base, and very rough beneath.

1 Vulture . Vultur 1º 1 32 kmiss

Bill thought, hooked chiefly at the end. Base covered with a naked skin. Head theeks, and often the neck, either naked, or ill clothed with down, or short hairs. Neck retractile, craw often hanging over the breast. Legs and feet covered with great scales. The outer toe joined to the middle one by a strong mem brane. Claws large, not much hooked, and blunt.

pl. 1, 2, 3, 4, 5, 6.

Nostrils roundish, partly covered by a membrane. Forgue more or less, extensile, bristly, fringed, or divided at the end into thready portions. 71 72 73

32 Roopoo. Upupa Promerops. 15 kinds. Bill long. Hander, and bending. Nortrils near the bake : Tonque various. Thes 4 three before, and one behind; middle one emnected at the base with the outer 66 he

mour.	
Order II Pies.	
36. Humming Bird. Trochylus. 95 kms.	Vol Page
Bill shender, weak, in some incurvated, in others straight.	Vostrils mi: 4 288
mute. Forgue very long, formed of two conjoined cylindrical tub	les, mifile. pl
Toes 3 before I behind. Inil of ten feathers Ligs weak.	75
	77
20 N +1 -1-6 /in 99 6:0:	18
30. Nuthalch. Sitta. 22 kniss.	
Bill generally straight, or very little bending. on the lower mand	ible a small
Abort, homy at the end, and jagged . For three before, one behr	ingue he he
middle one joined to the outer at the base. Back took claw as	no, me
the middle one.	63
17. V Oriole. Oriolus. 61 kinds.	
Bill straight conic, & sharp pointed . edges cultrated , inclining a both Mandibles could. Nostrill small at the	nward;
Forgue divided at the and. Toes 3 before, one behind will.	artly covered he
Imque divided at the end. Toes 3 before, one behind, middle one joi outer at the base.	ined to the 42
de	70
19. V Paradise Bird. Paradisea. 20 kmiss	3 180
But sugrely hent. vale covered with veloct like feathers. Nostrils some	11 - 11
in me feather. The first feathers, in some the two middles	: M
more, very long, and welves my at the base and tips. Legs & feel	tlange & 45
Thong . Foes three before me beh?	46
12 Pl 1	48
13. Plantain Eater. Musophages. 2 kind	4. 2 341.
was some, mangular; upper mantible elevated at the bade, k, here	Imig near
The tip . Wo the mandibles dentated at the coges . Northils rounded on the	edges, oval fil
placed in the middle of the bill . Imque thick, short k start. Foes 3 bef	1. 1 beh? 37
16 Roller	7
16 Roller. Coracias. 25 kniss.	3 70
Bill straight, bending towards the tip, edge cultrated. Nostrils now Legs mostly short. Toes 3 bef. I beh? divided to their origin.	now knake !
age morry snort. wes org. I beh. dweded to their origin.	41
	4
5. Shrike. Lanius. 122 kinds.	21
Bill straight at the base, end more or less hent generally a notch near to the upper mandible. Base not sumished with a case. Imque jagged a	the tip of
The upper mandible. Base not Jumished with a cere. Imque jagged a	the trip of pl.
sail composed of the feathers. Onler we connected with the middle one	e as foras 19 20
The first joint.	LU I

Index. OrderII. Pies.	11.1	5.
20. Curucui - Trogon. Johns.	3	203
Bill short, thick, & conver, generally dentrated on the edges. Northils covered with stiff bristles. Legs short, weak, & covered with feathers or down. Locs of	flat 49	2
28. Sacamar - Galbula - 5 hills	4	1
28. Sacamar - Galbrela Sands Shills oval mar the base Bill long . straight , sharp pointed . mostly quadrangular . Northill oval mear the base Tonque short . frinted . Legs feathered before to the locs which are to . i e 2 fefore 2 behavior	he	
24 Malkoha - Phoenicophans - 5kniss	3	252
Bill stout . longer than the head . curved from the base . smooth edged . Nastrils linear near the margin . Side of the head round the eye bare k granulated . Wrigh short . Joes to claws short and bent .	he	
four in white voice.		
b. Parrot. Psittaceed - 239 kins, Bill hoshed from the base; the upper mandible movemble. Northils round, at the base of	2	98
The bill, which in some is furnished with a care. Forgue broad, blunt at the end. in some	he	23
the tip is bristly. Head large crown flat legs short toes do .	26	23 25 27
7. Toucan. Phamphastos. 13 km 4.	2	280
Bill very large, convex, cannated at the top, and bending at the end. hollow very light, & servated at the edges. northils small & round. placed close to the head. and in many species quite his in the lattered.	pl.	
head. and in many species quite hid in the feathers. Tongue long, normow, feathers at the edges. Tail consisting of 10 feathers.	29	
27. Wood-pecker. Pieus. 91 kinsts	3	336
Bill generally straight, strong, angular, in some bent, kangular mly ontoh and		
cuneated at the end. Nastrils covered with reflected bristles. Tongue very long skinder, uphindric, long, hard, jagged at the ond, missile. Toes to 2 or 3 species excepted. Tail of ten stiff, sharp pointed feathers.	59	
	7	332
26. Whyneck. Bill romaich. slightly incurrented. I weak. Astails base of feathers, and Somewhat uneave. Forgue long slender and armed at the point. Zen	pe	032
Herible feathers in the tail. Foes to Between the Cucker & the wood	58 58	
picher.		

b baren moder 11. Pich			
33. Bee - cater. Merops. Sill quadrangular a little sharp pointed. Nostrils small, near the	, , ,	Oat	1/4
Bill quarrancelar a little short houted Nestrils small near the	base Imen	4	11/
various opererally slerider. Tools of in the toursaids & the backwarfs.	outer con.		-
ranions, generally slender. Toes of i.e three forwards & the backwards.		pl 68	
nected more or less with the middle one.		39	
10 I Home hill m	24 6:0	2	0.10
10 Hom bill. Buceros.	aller mest	1	303
This genus has a great, bending bill in many a large frotuberance on the dible, like another bill . Nostrils small round, placed near the base	Tonave		
small short. Legs scaly toes of middle one immeded with the or	ter as le	he	
as the third joint, with the winer as for as the first.	and Jas	33	
		34	
29. Kings fisher - Alcedo.	bo kniss	4	8
Bill long, strong, straight, and generally sharp pointed. Nostrils small	U. and in		
many hid in the feathers . Tongue short, broad , sharp pointed . Legs on	ort tous	2	
Some few have only 3 toes. Three lower joints of the middle me united	closely to	he	
time few have only 3 toes. Three lower joints of the middle me united those of the outer. Wrigs short. Hight rapid & strong.		61	
8. Motmot. Momotus.			
But pring, sugnite meren To be in the		2	290
Bill pretty strong, slightly incurvated & indented on the edges. Nostrick with feathers. Forgue long, narrow, feathered on the sides. Tail our Toes of the forward ones greatly united.	covered	pl	
Toes it . the forward ones greatly united.	neeform.	31	
35 (Jodes			
31 (Tody Bill thin, depressed, broad, base beset with brisles. Toes of the midse connected with the orter.	29 kmits	4	80
ison from alpropses, broas, vase beset with brisles. hes it the middle	le me greatly	,	
connected wint meoriler.		pl	
		65	
Order III. Passerine.			
· · · · · · · · · · · · · · · · · · ·			
* With thick Bills.			
Hill conic. slender towards the end, slender towards the ond a sharp pori from graf beaks whose billsslightly curve.			
Bill conic. slender towards the end, slinder to the the	150 kinds	6	45
from grafs beaks whose billsslightly curve.	ted. deffer	pl	
		96	
42. Bunting. Employing		97	
42. Bunting. Emberiza. Items; come bill. tedes of each mansible bending wiwards. in the world, a hard knop, to break seass.	82 Kails	5	290
a hard knop, to break seast.	he upper	he	
		91	
		92	

Index. Order III Passerine.	/1	7
41. J Grofs-beak. Loxia - 121 kmit	000	204
Index. Order III Passerine. 41.) Groß-beak. Loxia - 121 kmit Bill strong, convex above mid below, and thick at the base. Nostrils small med sound. Tonque as if cut off at the end. toes of	87 88 90	87 * 89
45. Plant-cutter. Phytotoma. 2 hinss Bill comic, straight, senated at the edges. Nostrils oral. tongue short obtuse.	6 pe 98	152
* * With curved bills: the upper mandible bent at the tip. 40. Coly. Bill conven above strought beneath short & thick apper mandible curved strong. Nostrils at the base, more or left had by feathers. Imgue cartilaginous, what, than the bill & laciniated at the end. Foes divided to their origin. In but ca- hable of accasionally having all four in front. Wings short.		195
53 Soat sicker. Caprimulgus. 40 kinds Bill short, hooked at the end. the gape very wide in most several still bill.	7	331
edges of the base of the upper mandible. Inque small entire at the end. Pail 107. Legs short toes united by a membrane to the first joint claw of the middle me broad edged in many jagged or Lemated. 30 Mandkin . Pipra. 43 kmids	7	219
with the outer as far as the decond, & in some as far as the third joint.	he 108 109	
52 V Swallow. Herundo Bill short, small at the point. a little bending. Nostrils ofen. Tongue short, broad, k in most cloven. Tail generally more or lefs forked. Hongs long. Legs short toes of in some of and in me of.	/ he 111 112 112* 113	276
** * With bills having the upper mandibles emarginated near the Fof. 39. Chatterer. Ampelis. Cotinga. 28 hmils Bill shaight, convex, broad at the base, bending towards the point near the cond of the upper mandible, having a towards. Nostails usually hid in the bristles. Middle toe connected with the outer at the base. Usually in America.	he 84 85 85*	172

	8 Index. Order III. Passerine.	4	
	46. Hycatcher. Muscicapa - 177 kms	6	134
	Bell more or less flattened at the base mod at that hart furnished with a fow		
	their origin .	he 98*	
ľ		100	
	43. Tanager . Tanagra. 61 hinds Bill conoid , a little inclining towards the point. The upper mandible more or lefs ridged; & of ten not ched near the end.	6	1
	will conord, a little inclining towards the point. The upper mandible more or left nidged: I often notehed near the end.	pl	
		94	ŀ
	38 Thrush . Jurdus . 234 kins	5	13
	Bill generally straight, bending towards the point. A generally with a notch hear the end of the upper mandible. Nastrils over towards to some slightly in and at	he 80	
	hear the end of the upper mandible. Nastrils oral. Tongue slightly jagged at the und. at the corners of the mouth a few hairs. huiddle toe connected to the	80	
	outer, to the first joint.	82	
	* * * * / · / / / / / / / / / / / / / /		
	* * * * Simple billed. Bill straight, integral, attenuated.		>
	47. Lark. Alauda. So knide. Bill straight, slender, a little bending towards the ond, sharp pointed. nostrils covered with leathers and brilles In	6	264
	the end	he	
	at the end Toes divided to their orgin. back toe claw very long, straight or ready	103	
	37. Starling. Sturmes. 13 kmiles	54	1
	Bill straight or very little bending depressed. Nastrils quarried above by a prominent rim. Tongue hard k cloven, or jagged at the tip. middle toe joined to the outer as far as the first joint.	he 79	
	joined to the outer as far as the first joint.	79	
	18. Wagtail Motacilla . 25 kmits Bill weak stender, slightly notified at the tip. Forgue lacerated at the end. Lail clongated . Legs stender. run . rarely hereh.	6	315
	Lail clongated. Legs Hender. nun. rarely hereh.	104	
	NJ. Warber. Julvia, Sanicala		-,
	Bill slender & weak. Nastrils small a lettle depressed. Inque in jeneral clover. outer toe joined at the under part to base of middle one. differ from wastril.	he	*,
	M. Titmande.	104* 10b	107
	Bill straight, a little comprehed. strong hard be shoot his to mental a 38 hints	7	244
	Bill straight, a little compressed. strong hand & sharp pointed most not round usually covered the origin. back too very large & strong.	he 110	

Index. Order IV. Columbine. V. 54. Pigeon. Columba. 136 kms.		9
54. Pigeon. Columba. 136 kmis.	use	hape
With the the last with a self bank !	10	1
nostrils are placed. Tongue entire. Legs short, the toes rarely united by a membrane. Tail of 12 feathers at least.	1	
membrane. Tail of 12 feathers at least.	he	
	118	
	170	
A 1 - Tr / 11:		
order. V. Gallinacious. 59 Curapow. Crax - 8 kmiss		
59 Curafrow. Crax - 8 kmiss	8	151
Bill convex strong, & thick, base covered with a core of an until		
Nostrils small loosed in the cere . Head sometimes with a crest of bathers urling at the ends . Juil large . straight.	1,	
urling at the ends. Tail large . straight.	123	
10.50		
63. Grous. Jetras 27 kints	8	223
Bill convex, strong short. Above each eye a nated skin. Nastrils small, his ni the feathers. Torrique pointed at the end. Legs strong feathered to the toes, and sometimes down the daws. The toes of several pectinated on the sides,	,	
in the feathers. Forgue pointed at the end. Legs strong feathered to the toes,	Al	
and tometimes four the daws. The toes of several pectinated on the kides	128	
STOP DI	0	121
57 Squan. Penelope. 11 kniss.	0	10/
Bill naked at the base. Head covered with feathers. Throat naked. Pail of 12 head	he	
Legs without spurs.	/21	
60 Menura. Menura - 1kmis	8	159
Bill stout, conico convex a trifle naked at the base. Nos trils oral placed		
about the middle of the bill. Tail long 16 loose webber feathers. two middle	he	
mes narrow. exceeding the others in length. Outer one in each dide growing	124	
much broader Leurved at the ond. Legs tout made for walking.		
by Partie	0	2/2
Bill convex, strong, nearly straight, or bending a little towards the end. Nos-	8	263
bill convex, strong, nearly straight, or bending a little towards the ond. Not-	pl	
hils everil above with a callous prominent nim. Eyes of ten du mounded	129	
with warty exercisences. Tail short, legs naked. toes various.	130	
Mr. Paral	131	
55. Peacock. Pavo. 7 kniss.		109
Bill convex strong. Nastrils large. Head small crested. Spurs on legs. Teathers	he 119	
abone the tail, long, broad, capansible.	120	

	10. Index. Order V. Gallinaceous.	Va	Pay
	61. Pheasant. Phasianus.	, 8	163
	Bill convex short strong. Head more or less covered with a carunculated bare. Sleshy membrane on the sides which in some is continued upwards to the crown. &	hl 124	
	beneath, so as to hong pendent under each jaw. Generally have spend.	124	*
1		126	
	38. Pintado. Numida. 4 kmiss.	8	144
	Bill convex, short, strong, at the base a carunculated cere in who the nostrile are placed. Head & neck naked. Slightly beset with briskles. A conical		
	proteberance reflected & large on the head . In one a crest of feathers) wattles	he 199	
	hanging from the cheeks. Tail short pointing downwards.	Jan	
	62 Tinamou. Tinamus. 15 kmis.	9	2/3
	Bill long blunt at the ond. northile in the middle : aahe wide side of her?		
	mout not were furnished with feathers. Jail very short, often hid in the feather	he	
1	of the coverts which are unusually long. Hind toe short chiefly useless in walking the claws hollowed beneath.	127	
	Bill moderate the upper mandible a little convex. Nastrils oblory, such,	8	347
	nas porten. conque carriagnoss, flat, fringed at the end. Legs naked a		
	lettle above the kneed. Joes of the last small with a round hos trehenous	pl 133	
	beneath it, wh is at a little distance from the ground.		
	56. Turkey. Callibara		
	Bill convex short & strong. Nastrils open, forieted at the ond, lodged in a membrane.	8	125
	with nakes carringulated Klesh. Shin of last lace?		
	and membraneous. Tail broad extensile. Spur blimt.		
	* * With three toes.		
	66. Bustard. Otis.		
	Bill a little convex, northils open, oblong. Tongue sloping on each side near the end and	8	357
	Bill a little convex, nothils open, oblong. Tongue stoping on each side near the end and hointed. Legs long, naked more or left above the knee. Toes 3. all forewards.	he 134	
		34	
		1	

Index. Order VI. Struthious.		11
* With four toes.	Tol ,	Page
67. Dodo. Didus. 3kmils	8	
Bill laye, vending invares, from the marked the upper mandeble marked in the		
two oblique nos, and much booked at the ond. Nostrile placed obliquely rear	pl	
the edge in the middle of the bill. Legs short, thick, feathered to a little below the knees. Foes three forward, one backward.	135	
* * With three toes placed forwards.		
69. Cassowany. Casuarius. 3 kmids.	8	381
It neight depressed till printed at the end. Neck more or less have of feathers.		
lorings very small k useless for flight. Thighs have of feathers above the knee. Toes three and all placed forwards.	137	
	138	
68. Emeu. Phea . 1hmi	8	379
Bill straight, depressed, somewhat rounded at the tip. wrigs usoless for flight. Lower part of this have of feathers. Three toes forwards, & a know behind	1,	
nistial of a toe.	he 136	
* * * With two toes placed forwards.		
70. Ostrich Struttin Camples. This.	8	387
Bill straight defressed like that of a truck . I rounded at the end . Wrigs small a weless for flight. Legs naked above the knees . Foes two flaces forwards .		
a useless for flight. Less nakes above the knees. Fores two, places forwards.	fl	
	139	
	1	
End of Division 1"! Land Birds.		

	12. Index. Division II. Order VII. Cloven Feet, or Wade	N. Vo	Maye
	74 Boat Bill . Caneroma . 1kins.	9	20
	Bill troat, with a keel on the middle of the upper part, like a tract revenes. Northill on	he	
ľ	* With four toes. 74. Boat-Bill. Cancroma. Bill broad, with a keel on the middle of the upper part, like a boat revenes. Northils on lodged in a funow. Tongue small. Toes divided.	144	4
	go. Cereopsis. ib. 1 kmio	STATE OF THE PARTY NAMED IN	432
	Bill short, conver, bent at the tip. Nastrils at the base, under the care. Inque obtaine, whole		
	Kead covered as far as the eyes with a rough skin , or cere . at the bend of the wing a blishing knob. Tail short of 16 feathers . Legs stout , bars above the knee . toes united by a membras	u fe	
	half way from the base. back toe small.	162	
	79. Curlew. Numerius.	. 9	170
	Bill long, incurvated. Nastrils linear, longitudinal, near the base. Tonque short, sharp fointed. Face covered with feathers. Toes connected as far as the first joint in the greater	he	
	part of the species.	hl 151	
	74 (Ends		
	Bill nearly straight, sharp at the end . the two mandibles not closing the whole of their length	9	137
	tace coveres with featness. Regs long. meadle toe connected to the inner by a menulouse	he	
ı	as far as the first, to the outer as far as the second joint. Kind too long, claws moderate.	149	
	88 Gallinule. Gallinula.		
	88 Gallinule. Gallinula 41 kinds. Bill thick at the base of ye upper mandible reach	9	396
	Bill thick at the base, & sloping towards the point. The base of ye apper mandible reaching far apora the fore-head, where it becomes membranacesess. Body compressed. Wings short and concave. Tail short. Toes divided to their origin.	he	
	and concave. Tail short. Toes divided to their origin.	160	
	76. Heron. Ardea Grus. 117 kints.		
	Bill long strong sharp pointed. Nastrils linear. Tonque pointed. Toes connected by a		25
	Bill long strong, sharp pointed. Nastrils linear. Inque pointed. Toes connected by a membrane at least as far as the first joint. The middle claw of true Heron's pectinated.	he 146	
		147	
	78. Ibis. 32 knils		141
	y mer at the base incernation of it	/	
	head naked. Tongue short. Foes connected at the base by a membrane.		
		1	
	ke. 168		

Bill by & large. both manifeles bending represent. The upper somewhat triangular. Stistudes smalle. Torque minute (Some say none) toes divided. 87. of acana. Parra. Bill long to fraction. Bill shader, sharp pointed, thickest towards the end: the base in many species, carnet whated. Nostrils subsociated, in the middle of the bill. Wrings armed on the front with me or more sharp speed. Their long. closure long, to straight, hornited. 85. Pratricole. Glareola. Bill short, string, straight, a little compression the saide. When manifele horsed at the one; gape wide. Nostrils near the base, linear, oblique. Thighe makes for half the length. Wrings long. Jail of 12 feathers. Johns or the most part. Toes long elimber of the hose places forward connected by a membrane. Back too half as long as the fore me. 88. Rail. Bill shower a little compression to stephtly bent. Nottils small of templaced in a surme. In gen may at the one. Rody compression the scient. In count me or more short spear at the edge of the wring. Tailingenerally short.	1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	13 12/4 384 369
87. Talana. Parra. By Talana. Parra. Bill shorter, sharp pointes, thickest towards the end: the bale in many species, canumulated. Nastrils subsvaled, in the middle of the bill. Wings armed in the front with me or more sharp specie. Toes long. Clowns long, & straight, horisted. 88 Pratricole. Bill short, string, straight, a little compression the sides. Mpho mandille horhed at the ond; gape wide. Nastril near the bale, linear, oblique. Thighs naked for half the length. Wings long. Sail of 12 feathers. Johned for the most hart. Toes long slinder to those placed forward counciled by a numbrane. Buch too half as long as the fore me. 88. Rail. Bill slander a little combression & slightly bent. Nottils small, of ten placed in a survey. I make some a title combression the scides. In sweet me on more short spear at the edge of the wing. Taile generally short. 81. Vandpiper. Tringa. 76 knits.		360
87. Jacana. Parra. Bill shuter, sharp printes. thickest towards the end. the base in many species, carner culated. Nastrils subovated, in the models of the bill. Wings armed in the front with me or more sharp spure. They close long, a straight, horized. 85 Pratricole. Glaresla. Bill short, strong, straight, a little compression the sides. When mandible horbes at the one; gape wide. Nostrils near the base, lunear, oblique. They want rakes for half the lingth. Wings long. Tail of 12 feathers. Johns for the most part. Toes long slender of the share placed sowards connected by a mumbrane. Back too half as long as the fore one. 88. Rail. Bill slander a little compression a slightly bent. Nostrils small, of ten placed in a surrow. Imput rough at the one. Body compression as he sides. In luring me of ten placed in a surrow. Imput rough at the one. Body compression as he sides. In luring me of ten placed in a surrow. 18 Vandhiser. Tringa. Tringa. To knits.		360
with me or more sharp spure. Foes long. clowns long, & straight, horisted. 85 Pratricole. Glaresla. Bill short, string. straight, a little compressed in the sides. Upper mansible hooked at the ondigape wide. Nostrils near the base, linear, oblique. Thighs naked for half the length. Wings long. Jail of 12 feathers. Johns for the most part. Toes long slunder of those placed forwards currented by a membrane. Back too half as long as the fore one. 86. Rail. Bill slunder a little compressed to slightly bent. Sostrils small, of enplaced in a farme. Impur most at the ond. Body compressed in the scides. In sured me or more short spew at the edge of the wing. Inill generally short. 81. Sandpiper. Tringa. Tringa. To knits.	2.	367
85 Pratricole. Glaresla. Bill short, strong, straight, a little compression the sides. Upper mansitle horber at the ond; gape wide. Nos trils near the base, linear, oblique. Thighs naked for half the length. Verings long. Jail of 12 feathers for the most part. Toes long slonder of the shase placed forwards connected by a mem brane. Back toe half as long as the fore one. 86. Rail. Bill slunder a little compression to slightly hent. Nostrils small, of ten placed in a farmer. Ingue orness at the ond. Body compression the sides. In several me or more obest speem at the edge of the wing. Taili generally short. 81. Vandpiper. Tringa. 76 knits.	2.	367
Ingth. Wrigs long. Sail of 12 feathers, forher for the most part. Tres long stender of the shore placed forwards connected by a menu brane. Back too half as long as the fore one. 86. Rail. Bill stender a little combrefeed & sleightly bent. Northils small, often placed in a farme. Inque rough at the one. Body comprefeed in the sides. In larval me or more other speem at the edge of the wing. Tails generally short. 81. Sandpiper. Tringa. 81. Sandpiper. Tringa. Bill straight, stender. I'p with long is left. Northils small. Toes divided or very slightly son.	7 7	367
86. Rail. Bill slunder a little compressed & slightly bent. Not trils small often placed in a surrow. Songue rough at the and. Body compressed on the scides. In curral me or more short spure at the edge of the wing. Tails generally short. 81. Sandpiper. Tringa. Bill straight, slender. 1/2 mich long to less. Nortrils small. Foes divided or vong slightly con.	1.	
Tongue rough at the ond. Body compressed in the sides. In sweral me or more short spure at the edge of the wring. Tails generally short. 81. Sandpiper. Tringa. Bill straight, stender. 1/2 wich long is lift. Northils small. Foel divided or way slightly con.		
81. Sandpiper. Tringa . Bill straight, slender. 1/2 wich long or left. Northils small. Toes divided or very slightly con.	8	
Bell straight, slender. I'p wich long & left. Northils small ford divided or very slightly con-		
neeted by a membrane at the base. hind too weak	7	245
	3	
72 Screamer. 2 koils.	7	8
Bill bending down at the point. Northils wal . Spurs at the hand of the wing . Toes divided to the origin , except a small membrane between each , at the bottom. Al 141	-	
12 * Canama. Bill as long as the head. hending toward the forint. Nostrils near the base, surrosmiles	7	12
by short feathers. It rouble tuft of feathers on the head. Legs long have considerably above the knew. Foes to latter short & too high to be of use in walking.	1	
89. Sheath. bill. Daginalis. Sill short thick a little convex top of the upper mandible covered with a horry sheath.	2 ,	130
	2	

	14. Index. Div II. Order VII		
	80. Inipe. Scolopax. 36 kinds.	19	185
	Bell long. Hender. for the most part straight. in some himning upwards. Northels		
	be small.	he	
	71 (Sham Bill. De +1	102	
	71. Spoon Bill. Platalea. Bill long broad, flat, & thin. end widening into a roundish form, not unlike a spoon. Nostrils small, placed near the base. Forgue sharp frinted. Face naked. Feet Lemihalmated.	9	1
	Nostrils small, placed near the base. Forgue sharp frinted. Face naked. Feet senifalmated.	he	
		140	
	75. Umbre. 1 knis.	0	23
	Bill strong . thick, compressed , upper mandible appeared to be composed of several		20
	pieces. Nostrils linear, and placed obliquely. Fres divided, with a slight membrane at the base.	he	
		145	
	* * With three toes placed forwards.		
	WHI Dry 111.	9	351
	Bill roundish bent downwards at the end & sharp gape wide . Northils oval. Tongue sharp Legs made for running with three toes placed forwards.	Le	
200	Junes jomans.	155	
	84. Dister catcher. Hæmatopus. 4 knids.		
	Will long compressed, currented at the end. Northils linear. Imque scarcely me third the longth of the bill. Outer toe joined to the middle by a strong membrane.	9	358
100 S. 600	me third the longth of the bill. Outer toe joined to the middle by a strong membrane	pl	
		150	
	82. Plover. Charadrius. Pluvialis. 44 kins.	a	3/1.
	Bell straight, for the most hast not lower than It 1 ? I		
	a few have a spurm the place of a back toe.	pl 154	
			1
			1

。 1. 18 18 18 18 18 18 18 18 18 18 18 18 18		
Index. Div. II. Order VIII. Pinnated Feet.	7r	15
93. Coot. Fulica	10	Page 12
Bill strong . Thick , sloping to the point , the base of the upper manditle rising far up	10	13
into the forehead. both manditles of equal length. Nastrils inclining to oval name	1.	
Bill strong. Thick, slaping to the point: the base of the upper manditle rising far up into the forchead: both manditles of equal length. Nastrils inclining to oval nammer short. Ires long. furnished with broad, scollaped membranes. Body compressed. wings thort. Tailsbort.	165	
92. Finfoot. 2. kink.	10	10
Bill moderately curved, possited and clongated. Northils linear. Body depressed. Fail somewhat curreiform. Legs short bes to furnished with an indented or scollaped manbrane . claws sharp & bent.		
Fail somewhat currenform. Legs short. Bes of furnished with an indented or	hl 164	
siruspes memorane. Laws sparp & sene.	164	
94. Grebe. Podiceps. 15 kml.	10	19
Bill in this is strong & sharp-pointed. Nastrill linear. Tonque shiply cloven at the end. Space between the bill and eyes, or love, bare of feathers. Body depresses feathers		
thick set, compact, very smoth, and globy . Wings short . Notail . Ligs places far		
11 2 short + the vent and on lake and double doubted at the back by		
Toes Jumished on each side with a broad, plain, membrane, and the toes with nail not unlike those of the human species.	re	
not unucle nervoyene	166	
91. Philarope Phalaropus. 7 kniss	10	1
Bill straight. Nastrils minutes. Body & legs as in the Sanspiper, but rather com- profeed on the sides. Toes furnished with a broad & generally scollaped, membrane.	he 163	

16. Inder. Div. II. Order IX Webfooted.	Ibe	n
* With long legs.	1	7
95. Avosets. Recurriros tra. 4 kmits	10	34
punions. Tonque short. Feet palmated. The webs deeply semilurated between each toe. Back toe very small, at a distance from the ground.	fel 16%	
al Caraina la comina de la comina del comina de la comina del la comina del la comina del la comina de la comina del la comi		
96. Courier. Corrira. Bill short, straight, the gape very wide. Legs long, thight short. Teet palmeter three toes before, one behind; the last short.	10	42.
97. Hamingo Phænicopterus. 2 kniss.	10	43
the higher part of the upper mandible (downwards) forming a sharp angle: The higher part of the upper mandible cannated; the lower compressed. The edges		
Mothile covered above with a thin plate pensions, hincorly linguitudidal.		
Jonque cartilaginous, & possited at the end; in the middle nucscular, base glandular, on the upper part acule ated. Neck very long. Legs and thighs to.		
Feet webbed; the webs extending to the claws, but deeply semilunated. Back too very small.	168	
* * With short legs.		
98. Albatrofs. Diomedea 4 huids. He strong bending in the middle, and hooked at the end of the upper mandible, that of the lower abrupt; the lower part inclining some	10	48
forwards, and covered with a large convex quard. Tongue searchy herceptible mly the sudiment of one. Fors three, all placed forwards.	le.	
	169	
99. Awk. Alca. Bill smooth edged, short, companies (13 kmils.	10	55
frequently transversely furrowed. Nastrile (in sept one kind, who is deported) conver		
Inque almost as long as the bill. Foes three placed formands.	Va	
	170	

The same and the s		
Index. Div." II. Order IX.	mi	17,
11. Darter. Plotus.	10	449
Bill long . Straight , and sharp - possited . Nostrils a long shit near the base .		
Face and chin have of feathers. Neck of a very great length. Legs short. Joes four, all webbed together.	11	
	184	
101. Diver. Columbus.		
101. Diver. Colymbus. Bill strong, straight, posited; upper manoible the longest, bouring edges of	10	84
lack vending inwards. Nosthill timear. Forgue long and pointed, derrated		
on each side near the base. Legs compressed. Four four. The exterior the		
longest. The back one joined to the interior by a small membranes. Tail short twenty feathers.		
	172	
107. Duck. Anas.		
Bill strong, broad, defressed, and commonly furnished at the end with an	10	214
asormonel prece called a nail. The coges of the mandibles, marked with snash		
hamelloe unitating leeth. Nashels bruall and oral. Tongue tood, dometine		
wroqular in shape and friezed near the base. Toes three before, one bekind, the middle toe longest.	he	
	179	
	178	
106. Goodander, or Merganser. Mergus. 8 kmiss.	10	199
sawed at the sides: at the ond a crooked nail. Nastrils small, oral, at the		
middle of the bill. Feet with four tres of palmated. The outer me before	he	
longer than that of the middle.	177	
	-	
100. Guillemot. Una. 6 kmies	10	74
Bill straight, slender, possited: The upper mandible slightly bending at the and.		
lase covered with short feathers. Nostrils hisear, at the base of the bill.	Re	
	171	
104. Gull. Larus. 27 kniss.	10	131
Bill strong, straight, bending at the foint. On the under part of the lower man.		
bill; in some covered with a cere. Tonque a little cloven. Legs small, naked	175	
above the knees. back toe small.		

	, 18. Index. Divn II. Order IX.	20	1 %
-	109. Pelican. Pelicanus. 39 kms		398
	Bill long, straight, the end either hooked, or sloping. Nostrils in a furming along the sides of the bill, and in most of the species, secarcely		
	distruguishable. Face chiefly destitute of feathers; being covered only		
	with a base shin. Jullet naked, in some capable of great distension.	pl	
	Toes four, all welshed together. The species differ very much.	18%	
	108. Penauin Abtandt		
	108. Penguin. Aptenodytes. Bill strong, straight, more or less bending at the point, a surrowed at the side.	10	380
	order praces on me farmer, Lituation undetermined, formans commend		
	of funds poining vacaward. Amags small, useless for Miles	,	
	for the most part mitating fins; covers with scaly feathers; ma few only a base stump. Jail various: in some scarcely appearing beyond the rumb. Lead that I this		
	any ours mek, placed near the read I.	ple 180	
	in the suck geners. In deveral the back too in the	181	
	Leen only in the temperate and frigio zones.	125	
	105. Petrel. Procellaria. 30 km s	10	170
September 1	the sent as me end. Nostrale to the ment to		
	nione tube, but in a few they are distinct and separate. Legs naked above the knees. Toes palmated. Three forwards with a spur behind, mistical of a toe. One species has not the shure	1	
	of a toe. One species has not the speer.	176	
	102. Akimmen 111		
	102. Skimmer. Rhynchops. Bile greatly compresses lower mandible much longer than the other, & trun- cated at the end. Nastrils linear, near theede longer of the sale.	10	16
	cated at the end. Nastrils linear, near the edge ; persions. Four toes, plalmated, thender, hind toe very small. Jail forked.		
	Hunder, hind toe very small. Tail forked.	he	
	103. Jern. Stance	1/3	
	103. Tern. Sterna. Bill straight, slinder, fromted. wings long. Tail forker. Feet weller weak, back tre very small. much the tot to	10	99
	weak, back toe very small. much affinity between these and the fulls.		
		he 174	

Index. Div. II. Order IX

10. Tropic Bird. Photon.

Bill compressed. slightly sloping down. point sharp; under mandrible angular. Nastrils penvines. Tail cunciform, the two middle seathers (atending much beyond the others. Trees four all webbed together.

End of Index.

2 Divisions. 9 Orders. 111 Senera. 4324 Species besides Some variations of particular Species: plates 184 duplicate numbers 7. Implicate 1. total. 192.

hire birds in cages. but where this is the case it is mentioned: also if it be taken from another picture or a stuffed specimen. In some the tongue is mentioned to have the hooked joint " that is when the tongue has a joint near the root with a sort of barb pointing backwards like this. When a bird is stated to be drawn 1/2 - 3/4 de the natural vize. it is by reale, with proportional compasses.

20.

nicorrectly.

when open.

it placing the book in its natural setting position, and measuring by the curvature of the Head, neck freek lo

Jig. 1.
Goatsucker
May 11.1827.



This is very like the Bombay Goat sucker. Not 7. P. 337. deffers in the colour of the quills of vering. and in the white on them, and on the four onter feathers of the tail. Of the quills of this, the outermost is white on the visioner web; the next on both webs, but not on the quill: the two next on both webs & quills. Lungth of this one 5% wich. 4 % wich. I wasth of the mouth at the root 1/8 wich. Nothils very prominant and inclining forwards. Middle too membraned to both the others to the frist joints, and twice as long as either of them. Back too very small. Lays two eggs on the ground, while with black shots. held at Thangur Futti ordifor Freen. Turkseles. May 10 th 1824. called Gud khana. Lun all the year. MB. The paleath colour was in such minuted pots of of I winifete it. There of he here & there a spot of longinous form, in other respects color correct. 10 Feethers in the tail.

Ingus small, sharf and red.



Length 5/2 wich 4 wich.

Breadth 8 3/4 wiches.

Lack and Scarlet Thrush The variations mentioned the same bird immateure. I have short thim do, when four of the middle wring never black, and the wring never black, and the low of what their froher the tail not half their froher length. The semale described in that A. is the correct one.

Nest of feather k grafs small; lays three eggs, darkish with ted shots. Found in the Shene Doon and wanner parts of the Kills earlier Dhunchuree, chipechuree, or Bun pinchoon. The black on the upper parts has a blueish gloss. middle k outer toes joined, to the first joint. Back toe as large as the middle claws sharp k front. The searlet has in nature a beautiful silky gloss, which I would not initate.

Fig 2. The female if any thing a little larger than the male, which I have seen without the while shot over the eye. Where the make is blueish black, the female is mouse colour, it on the rump approaches to ask colour 11/10 of the tail. The two outer feathers are who withe shalf, black on a knowlet all the miner web, and a narrow strip on the outer web. and the two thirds have little black on the inner web. Locs and

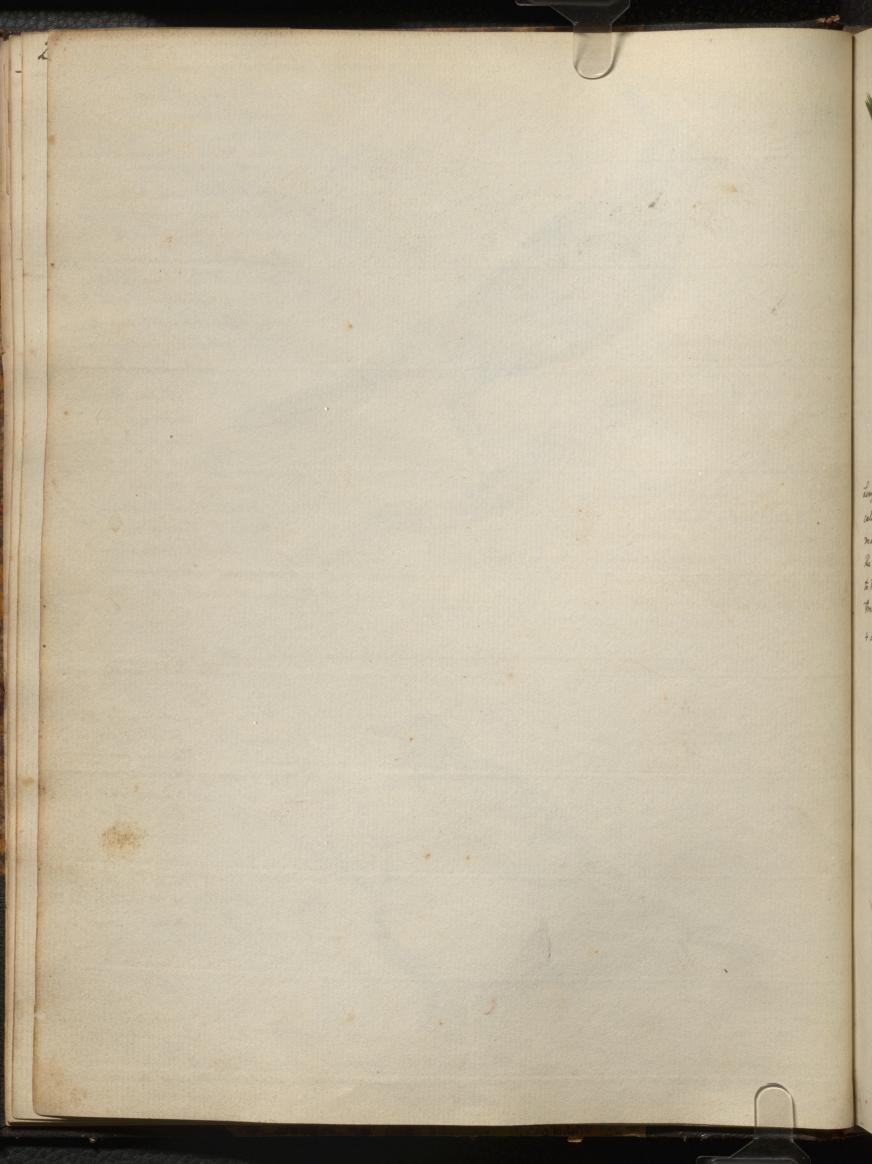


the rest 11/2 inch wo outer tail feathers 3/4 wich shorter han middle one. Two next /4 in theter. stoftail even

lonk

Only seen The six Lunmer months. called Daher . huilds in hollow trees . lays four eggs white with black spots. Lings very well . nest of grafs. Known in Hinder tan , and when

Both Mandibles hollow inside. Outer toe joined to the middle to the first joint. The under part of the wing quills and the roots of the belly feathers, state color. Nostrils pervious. Color correct. Shape exact, but the bluish black has in nature a gloss which I could not imitate. In its natural position no more white is seen on the tail which has 12 hatters. but the three outer on each side are entirely white. The two fourths all but a little black on their t



Ligt. A species of characteristics

May 12.1827.

MB. The red shot on the side is sather two high up. Mis bing has by Ime , see U.3. 1853.

Longth 7/2 wich. 2/2 inch. from print of litt to gape 1/8 wich. Bread the 12 /8 wich. Formed in Putti oddipoor. called Kathhora + . Both mandibles hollow inside. The nostrils linear, in a dent in the bill. Under mandible slightly longer the other. Tongue 3 pasts as long as the bill. flat & home. Toes two before two behind. The outer force & hind respectively twice as long as the inner. Two force toes rather longer than the two hind, and joined to the first joint. Hesh bare round the eye. The tail feathers ten. ends nebbed, apparently by clinibing trees under parts of wring whiteith. ends of quill slate color. Ploots of all the feathers to, eacht of no when he is a wood pecher. a name very indiscriminately given, to any long, or strong billes brid.

Length 5/4 mich. 4 in Fig 2. Sold Vented Thrush. Breadth. 11 /2. Seen in the Hills . Vol 5. P. 82. Claus sharp and hooked. and allover The description is correct Hindortan as far as it goes . except May 13 - 1827. multing mentioning Drawn over again be vol 2. Pl. 13. the tips of the tail feathers being while for 1/2 an wich. The eye is lead color . darke than I have madect. b feathers in the tail, even. The head feathers do form a small crest when the bird is on the alart. Called Boolbool . & in the Hills Shur Pinchood. The nest is very deep. lays 2 to beggs grey with red and white spots. Can be tamed and Another dort similar, except the vent being yellow, will not sing when tamed. shaped in a sent

Fig 1. Some of the people say this is the female; that the small has a small top-know in other respects the same. June b. June 6. 1828. This is not the real kaful purkere. See Vol 3. Pl. 8.



Jound in the There Dorn & warmer hasts of the Hills. During spring its ones are heard at all times being the day & might. like The The natives pury it pronounces haful pucker (i.e.) the haful fruit is tipe I called Cuffers. Lingth I'm to make the It's mich. It's feathers are all large, hesticularly the fail corerts, in proportion to its sign. The outer roming guill has a patch of white about the residele, in the inner web, and the rest of the fathers have a small shot of white in their miner webs, making a har inner web, and the rest of the fathers have a small shot of white in their miner with sand of white but only writtle by looking under the wring. The under tail coverts heautifully harred with ash-color. Taill 10 feathers, two outer two thirds the length of the other eight, who are even, four turner me way four the other, thus forking the tail. Billy a throat & vent black. When haves, amigs & tail (except the two outer feathers withh are barred like the under tail coverts.) black with a green with, blueith, purple gloss. This an elegant brid and shie trong quick like a small hank. It hills next of grafs and feathers, in branches of trees. lays 2 cags. breeks in mid of May or fune, after the lefter farter made fathers, in branches of trees. lays 2 cags. breeks in mid of May or fune, after the lefter farter made hards claure home color. Shorp & horsked.



Fig 2. May 14. 1827.

Fraun over again Lee Vol 2. 14. 5%.

Leuth 5/4 m. 3/4 mich. Breadth 10 in . Kelled in Putti Dodipoor . Called Bun gendurie. Builds a large globular nest of grafs a big as a manis head, with a hele in one side for vigrefs . Lays the boy has been from b to 12 heard as many as 20 eggs . robite.

Ho claws & bill would pronounce it to be of the last genus, but habiting the hatters in tails of which the two middle have a narrow rayed web. The brown of the tail fathers lighter to outwards.

. Fig 1. Called Dhenchos by the Pestans.

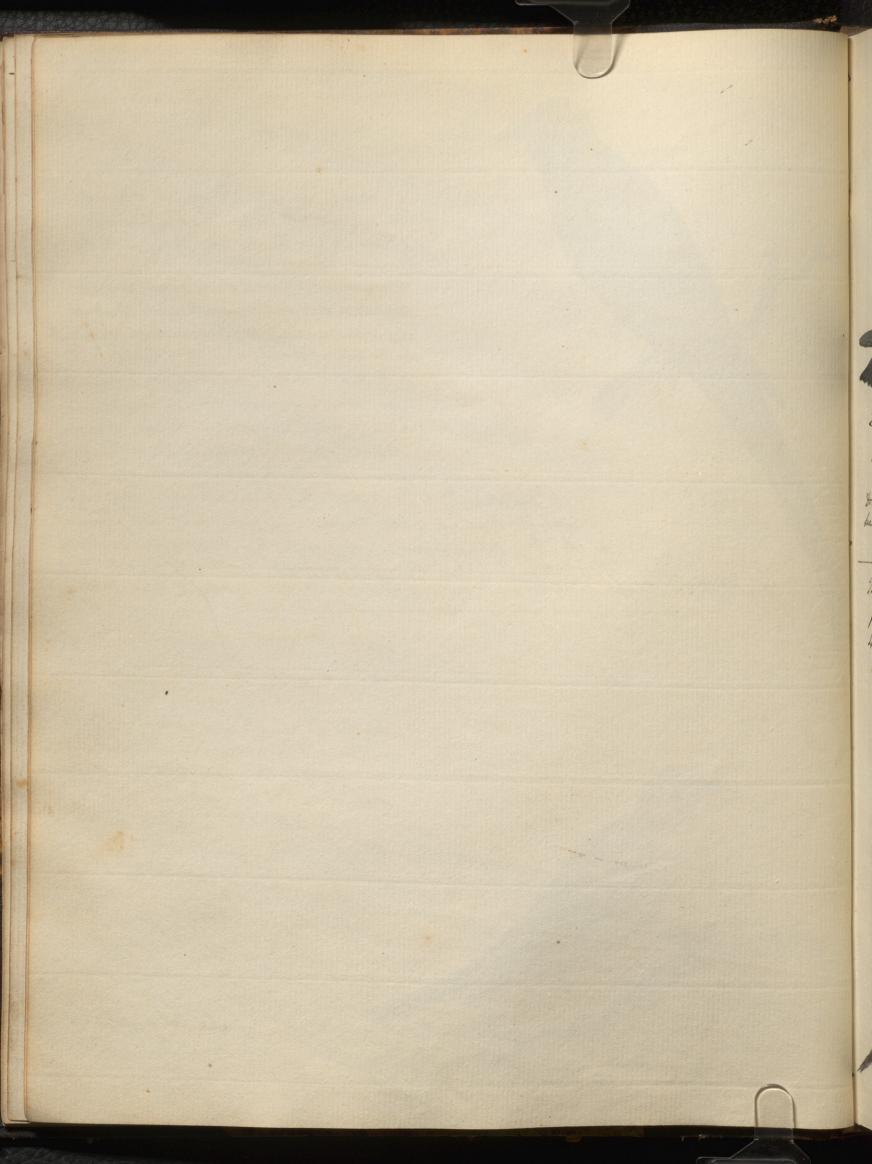


Fig 1. Common blue pidgeon of India (wild). may 16 th



Lingth

9/2 mi. 4/2 mi. 22 3/4 mi. brows. The Jungle Misgeon. of Ratham. V. 8. 1.

lines in some parts of Surhwall Mulleria

brown over again
be Vol 2. M. 24.

The feathers of the back of the head, noe d'h nich long. They k those on the neah, k lepher part of the breast are like Cocks hackles. Called Powee. eals fruits. builds in hollow trees lays from 4 to beggs. sirity white with black k red spots. Irings very well. Enterty and considerate see. I want over again see Vol 3. Ne. 28.

Fig 2. The Pagoda Grackle of Latham Vol 3. 4. 150.

May 21 " Length bin . 2/2 in breadth . 123/4 inch Killed near Freeninger. Longth of Bill to the gape 1/10 inch. The white of the eye ball, is a glassy yellowish whiteness, robich I could not mitate. Northil surrounded by a projecting rim. Wring quille black under heath, but lighter approaching to brown as they near the body. Above outer of quills black, next Is blackish with a stripe of the outer web light state color. The net slate colour. miner wing coverts pure white. Tail 12 feathers . It has a Night green is a tinge in its black, I mich of the tips of the 2 outer white, the rest do. but left & left hil only 1/2 of an wich of the 2 middle are white. There toe joins to middle to first joint. Lege strong feet k tou large k scale, Tonque homy neither very sharp or very rounded.

Fig 2. Add notice. Rump pale disty whiteish orange. In some the vent has a slight trige of the same. Inner wing coverts the same. miside of the wings light slate color. Of the tail, the six middle feathers are nearly equal length. The two thirds rather longer: the two sumbs still longer, k the two onter, double the length of the middle feathers. Called Barnence or But Barnence (a common name in the hills for several swallows.) That one at Pa's at the Ingue shott, flat, homy, k pointed, k divided at the end.

Fig 1.

Apparently answers
exactly to the description
of the English Chimney
twallow. V. Vol 7. P. 277.

St. 7.

Longth, 4 10 mich - 23/10 . bread the 113/4. Killed at breensegur May 22 - 1827. MB. The eye is much lighter than in nature. Called kutar.



Tig 2. May 22 2

Jength 3 % in . 1/2 in . Broth 9 % in .

adelicate little bird . killed at breenuper fail 12 feathers slightly forked . The wings when closed reach a very little beyond the .

tail . There appears no difference between malerand female : at least of fired nito a large flock collected round a puddle , and killed 34.

See Vol 4. Pl. 27. only abother fig.

Jig 3. May 25 Grawn over again bol. 2. M. 29.

Maharatta Wood pecker

Vol 3. P. 356.

Litled in Purguna Naghor Freenugur.

Length 5/8 - 3/8. Bill 1/8 miches.

Breath 13/4 miches.

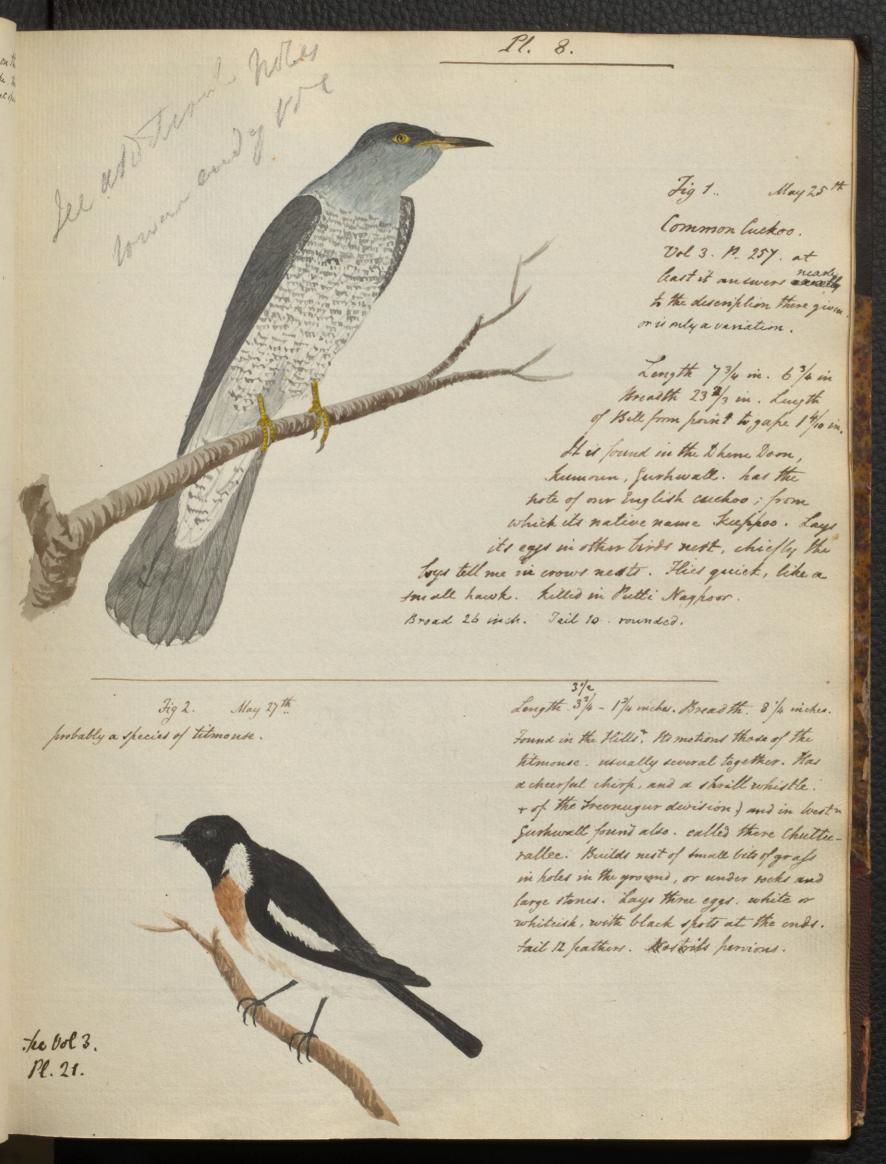
Breadth 13 /4 miches.

Jail 10 feethers four middle black, and extended beyond the others as Brawn. When the wrigs we closed the quills appear irregularly marked with white; but on spreading them out; four segular rows of white dots appear.

Claus to the inner hind claw very small.

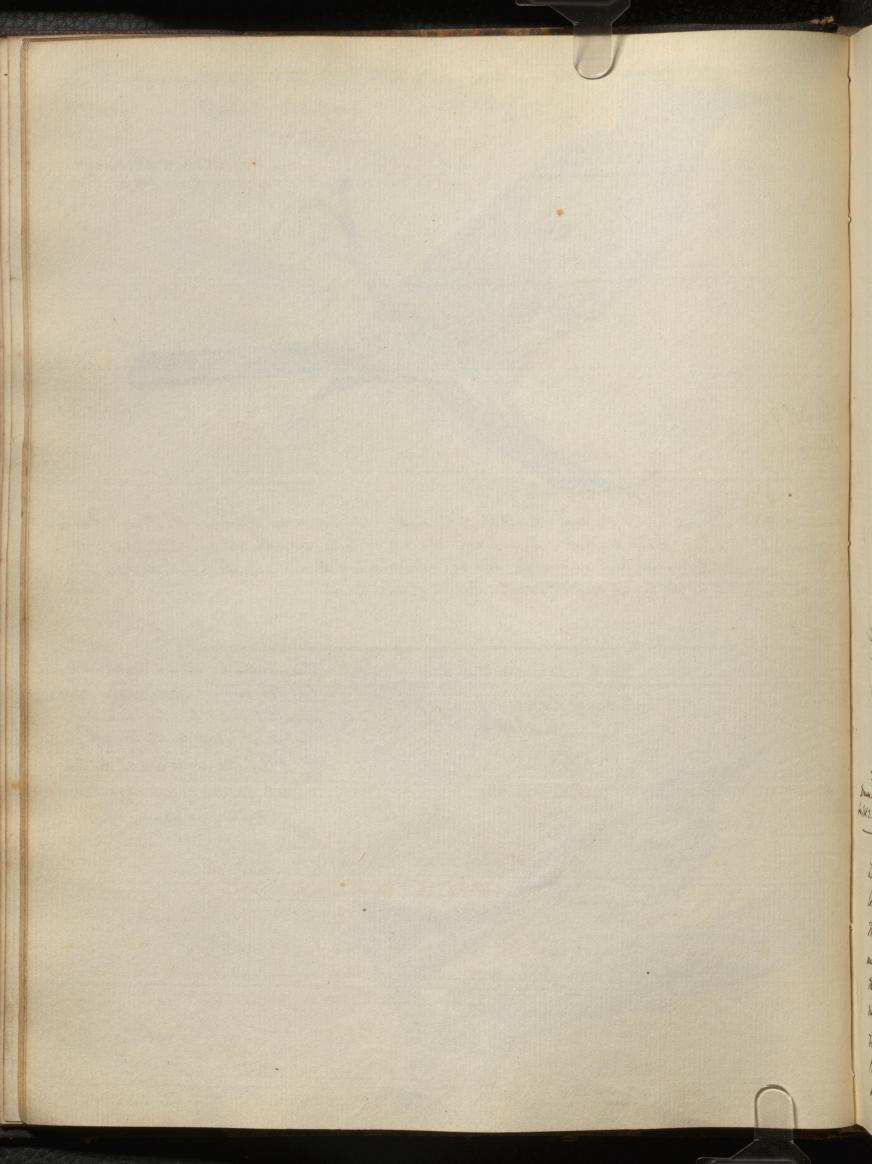


Fig 1. I shot one apparently the same species, in which the corrector bars of black on the breast, were broader than in this; and its tail was barred with white. a different species.



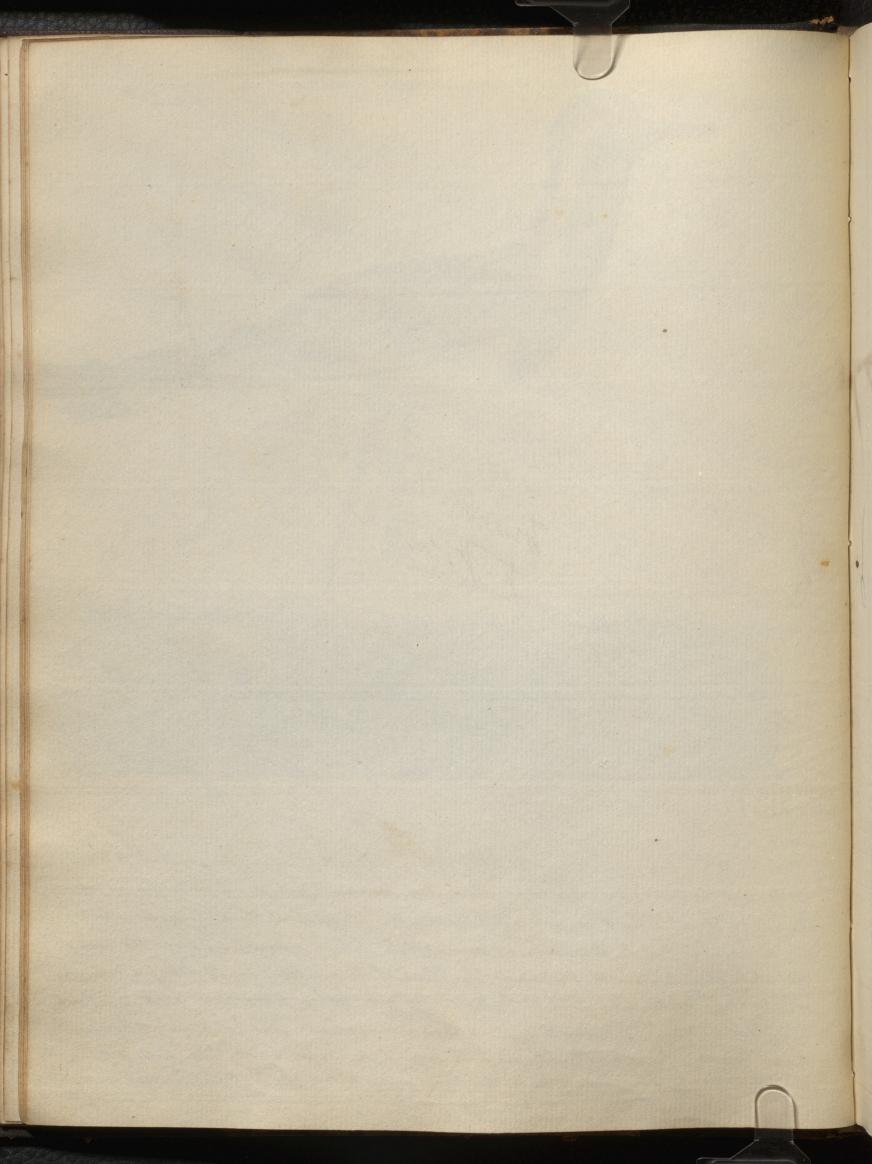
Tig 1. Its Hill name Bun Bakur, or Bun Bakra, mened forest goat. from a fancied resemblance in its voice to a goat's bleat.





St. 10. Fig 1 - May 27 # Fram again Lee Ust 3. Pl. 36 Red wattled Repaire (Sareogrammus indicus)

Longth. 9/4 - 4/4 miches. Bread the 29 /4 inches. Length of leg. upper joint 32/3 mich. lower joint (excluding toes) 3/4 sich. Back claw two small & high up, to be of any use. The whole of the white parts are delicate pure white. Noots of all the way, quills while, and the hips of all but the I outer wang coverts white which when closed gives the way, that white shipe between the trown and the black of the quills. Point of longue rounded, not very shift. month red. Jail 12 feathers. The ends broken like a wood peckers, (ask teny apparent why.) Lound in Bengal, and over thindoshou. This hills near o keement. Called tuterce. from a resemblance to it eny. it also makes a norse like "Pity to do it", sometimes merely screeches. of ten in the night. The nostrils can be seen through.



There any. Nothild laye & some hid in bis Hes, a few short hairs at the convers of month. This food grafe-happens. Next of their sticks. Tongue short, honey at end, & oplit for /x inch. A notch in the wiphor beak. Both mondibles, the ensure ne particularly, hollow inside. The tips of all the wing quill white, but when closed no more applicant thou is traver. Tail has Mr. m. inc. u amuse me pornon.

way, as if incorrunded by its langth. Called Eurapin. Build in tall fir or other true. has two to four young, Townle.

prouch the same colours, but a short fail. Clause hosked, strong, shark, and half as long as the town. Hack too strongs Lee Ost 4: 17:14 Traun again Answers nearly to the Ned Willed Jay. Langth 934 - 1734 inches. Breadth 22/4 mich. Bill 15/8 mich. Girth 85/8 wich. Formal in Jashwall. Mr. the Inil is drawn in this position to show it, But in perchaing it hange down, and the bird lies in a cleaner, was Heir Vol 3. 1.27. or is but a trifling 12 feather, the two outer, are like, but Norter than, and are his by, the two decouses. Vellow-billed Blue-may pie (Wiverissa Har inostrie). + this was the me, but must be a mistake. has it buther thered webs: the Hack hathle high hory hills hidd class gette



Ligt. May 19th

Lingth 5 % - 3 % a - Bill 3/4 - Breadth 9/2 miches. Found in the planis & Heles. This hilled near Akrot kotee. not far from kidas Nat. Called in the planis fougace. generally seen many brother in low bushes, hopping quickly from one to the other. Tail 12 feathers, fa an wich at the ways of each being white. The feathers all over, except the tail, here posited, by having the webs narrower towards the end. Called in the Hills Mostpekura or thekuree. Impue bristles at the ond. Builds in low tribes, nest of fine thingsafs, cut small, lays three or four eggs, brown black, sed, & white mined. Inittle & outof toes joined to 1st found. It carries the tail usually cooked. Nashils large with a few small bristles over them. A few hairs at the corner of moreth, a small noted at the thof the upper mandible. Brown over again. See Pl. 13. Val 3,



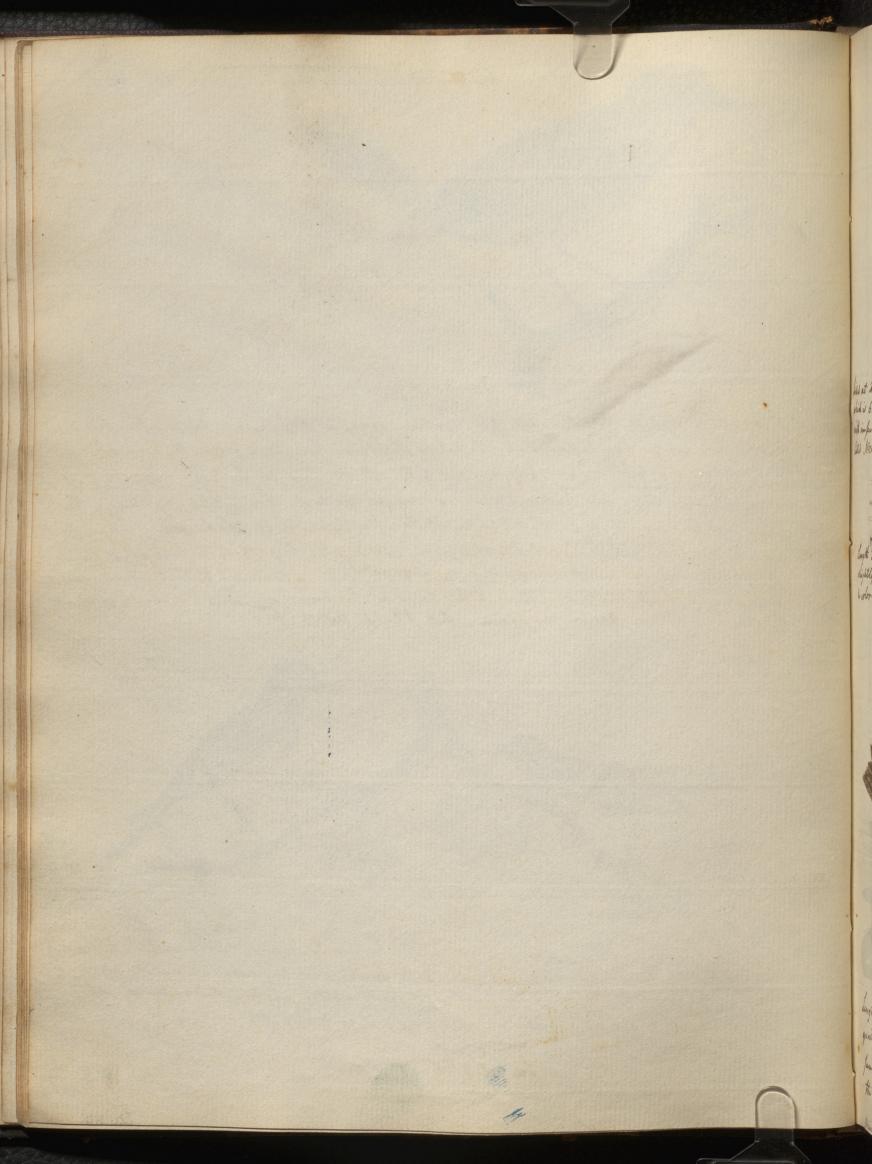
to 1od foint. Fail 12 feathers. 2 middle black. 2

white at rost half.

5th white a fourth way from their works the other eight

Lingth 2 /4 - 1/4 inches. Bread the bis inch. hilled not far from Kidarnat. called kurkoshee. Imiddle and onter toe joined to 1st foint. Claws sharp & horked. miner wing corests yellow. Tail 12 feathers.

Law vol & Pl. 54





Explanation to Pl. 14.

Tig ! - Length 4/8 - 2/3 mich. Broad II /4 wich. Lail 12 feathers: the two outer whiteon most of the outer web & part of the niner: the two next white at the hip inner wing coverts yellowish green. Nostrils heroires. A little yellowish green on the shoulders, which is hid by the over-bapping of the breash feathers. Pilled at Kidarnat, close under the perfectual snow: Inow his there to heep as to be impracticable for people to visit it, for six rum the in the year. lalled Soorince. It is a species of lark.

Lee Of 2.

Jig. 2. This has the motions, and appearance of the Snylish Blackberd; but go her close, the blue trings is perceived. The feathers of the head, throat, neck, naw over again. highes present are possibled; and at the cuts dashea gloss, which ni knue again. highes gives it the appearance of being a lighter color, this I could not vinice bee vol 3 tate. hiddle k nature toes membraned tog other. Belly k went black.

10. 30. Under mandible square at its root; and hollow in the centre of the under hart. The brownish green of the use-ball is lighter than in nature.

Length 9 - 5/2 - mikes. Bill 1/2. broad 21/3/4 mich. Tomes in the Door, and infurhwall both the warmer k colour fasts. lalled Kuljet. Inque onell, homy, & jagged.

Leby 26 Thot one of last year. all brown with a greenish tringe. Beak the same color, as this, but not so much hooked. Legs disty greenish yellow. I suspect this was a different him deptrio

Fig. 3. Length 1/8 - 2/8 - Bill 1/8 - Broad 8/2 inches. Iniddle and onter too joined to the first joint. Belly dirty white. Vent white. Inside of the wing quill, dirty white on the inner web, state color on outer web. Inner wing coverts white. Legs brownish state color. Tail twelve feathers. Blue on outer webs, black on inner. Killed near Kidarnat. Called Fitgoonw. Has much the motions of a Robin. Creeks the head feather slightly, lee Uol 3 now and then. Claws slightly hooked and not very sharp. Builts in the roots of tasts of grafs, lays three eggs. whom dirty white with a reddish tringe. Inale a semale alike. Under wing erverts very short, and white. Tongue homy and sharp from ted.

1

Pl. 14. Lig. 1. June 1. x June 4 th. Fig 2. June 2?

Fig 1. Length 9 1/4 - 5 5/8 - Broad 27 - niches. Belly, breast, nimer wing corerts pure white. Inil 12 feathers, Hightly rounded: to that the black is less towards the onter feathers. The two onter feathers have searcely any white on them. Welled at Kidarnat. Called Sankulu, Inque toft, bayonet shaped, the flat side uppermost.

See Vol 2 M.4.

Jig 2 - Longth 12 2 - 6/2 - Bill 2/4 - Broad 33 - enches.

mu elegant brid. The whole of the feathers pure black. Those of the Heast, nech, throat, and upper part of the breast have a velvet gloßeineß, which I could not michate. When walking about its motions are more like those of a pidgeon than a crow, of which genus it apparently is. It makes a screeching noise, I what at kidamat. Inale and female alike; at least a pair were together, most likely male & female, capparoutly alike, but I only enceeded in shooting one. The toes scaled like a lotter's tail. Inil 10 feathers. Called Saguree Kowa (or kak) i.e. Innove crow. The nostrils empletely his in the small feathers at the root of the bill. They are large & round.

Le vol 3. M. p.

Pl. 15. Lig 1. June 2 ? the the Fig 2. June 2: Jig 1. Length 5/4 - 3/8 wich. Broat 11/4 nich. Tomphe rounded and fagged.

tuter and middle toe joined to 1' frint. Found in the Born and Hills, both
traumover in warm and cold places; by the side of streams, hopping about among the
again. large stones with much the motions of a Mobin. This one killed near hidar.
but old 3. Past. Called there Chandeeu Churu i in other parts Do bee Cherra. The use is so much the
18.55. Past. Called there Chandeeu Churu i in other parts Do bee Cherra. I have make it
rolor of the surmending feathers, that its glistening alone distinguishes it in nature. I have make it
lighter color.

Jig. 2. Lingth to the - 2 inches. Toes membranes together half owny who the first joint. britis toe four givints. Middle toe 1/2 inch long. Bill 9/10 mich.

Jee Ool 2. Inque off, short, and rounded. laught near kidarnat, in a noode, what M. 5. buts cold places. Cabled Proora days two eggs, in prest of grafs very lange, mondified the bris has been long in a case. Joset the fullen to me it goar just caught recent that the problems, but it is national. Broad 18 /2 miches. Tail 4 rounds hidden by courts. Lives like break, with while & refords rasher, back shi be since greenish brown with regular senses was so makes with a fatch of black. The light brown, while was lived who with a fatch of black. The light brown, while was, lailled chouldle brown with light edges. Hours eye beve caremouleted rock hinks brink, wides of month of on shoulder a few white stoyles down the shafts. Bufores on the head should have a few black dasher. Black of the throat shi be more deched with white.

Jig 3. Length. 6 % - 3/4 - Bill 1/8. Broad 1/4 % - inches. Throat dirty white with a greenish yellowish tinge. Breast & belly light greenish yellow, with a very slight miature of grey. Dent and under tail corress (which are very short) light orange. Chaves & the outer back the largest. Outer front not much left. Inner front half as hig. nines back a quarter as large. Claws much hoshed and very shark. Louil ten feathers. hilled near Lidarnat. Tongue not very long, projecting an inch beyond the point of bill; and armed at the end with deveral small bardes on each side. Tous a legs light lead colour. Called Huldia Dan. (Imm its being sed on head & vent the man tells me, but the derivation of caronot make out.) Inner wrig coverts white madile of the wing quills state color. The wring quills have each shots of white in both webs. the longest have five rows, the shortest three. I omed in Gurhwall.

Le 2064 M. 26

Pl. 16. Fig 1 ... - June 2 m Fig. 3. June 4th

Jig. 1. Lingth 7/2 - 5/2 - Bills 1/8 - Bosed 15/2 - Jail 12 feathers rounded. The much of the ends of the four onter on each side, white. Forms in the Boon, and Hills. both cold k warm places. Willed near Observant. Called Duriocel. Builds in branches of brees. lays three or four eggs; huse white, with black spots. Prefess fruits; but will eat misects. Lingth of shin 1 1/4 mich loss menubraned by other at under hast; the middle and willer to half way up the first joint. Tongue horny, flat, very be bol 3. thin, slightly bristled at the end.

10.39.

This is bastly done Lee Ool 3.

Jig 2. Longth 6 - 27/8 - Bill 1 - Bood 12 3/8 - miches. Broast, and sides of belly brownish orange. Vent do but lighter. Belly white. Tail 12 feathers even. Tongue homy, napoon, hollowed, and bristled at the end. Thilled near Okcemutt. Called me Koola. Builds in branches of trees, of leaves and small twigs. Lays from two to die 3. eggs. Black, not very dark, with white shots. Eats fruits. Has no song. Temale brown with white breast and belly. (This is like but not nearly done it was a difficult lid to draw.) The white of the eye should be a glafsy whiteness. Iniddle and enter thes joined to 1" frint. A. Claws hooked, and tolerably shook.

Tig. 3. Lugate for for the Blu /3 - Breas the 10/4 miches Immer wing coverests neares the de not 2. body fawn color then black, ends white. Dent cited white with edges of feathers M. Sh. Jawn color Inside of wing quills light lead color. Jail 12 feathers. Iwo middle strawn again ones blue. others black with a white shot on vinner web near the centre. Ends flue. Jongulnithed. Joes mid & outer joined to first joint. Middle and vinner half way up. Back too and claw largest. Inverfront very small. Claws hooked & very sharp.

June 6th 1828. That one at Pokree. much the same but the colors lighter all over, particularly the under parts. no white on side of head. Legs brown. Vent same as belly. Tail has the two middle feathers, white at the root half, except the edge of outer web. The feathers as above mentioned, but the white encreases, outwards, the two outer being white at the end half, except the tips.

Pl. 17. Tig. t. - June 5 th Fig 3. Fig. 2. June 5th

Fig. 1. Length 8/2 - 73/4 - Brown 30 - niches. Iniddle toe exclusive of claw 1/8 nich. Joes merabraned to gether. The huille and auter, more than to the inner. Tail twelve feathers, rounded. Nump brownish slate color, the black bars not to dark, as, and smaller than on the back. Inside of wing, grey barred with black. The inner wing coverts the same with a very slight tinge of violet, and spotted with black.

That is Purguence Nagfor near the Pohree compensation. Meenent.

Fig. 2. Lugth 5 \$\frac{1}{2} - 43/3. Bill 1 - Broad 12 1/3 - inches. Inner wing coverts grey, with shight whitein specker. A white patch on the inner web, retarthe roots, of the middle wing quills. Vent white. Tail ten feathers luneiform. The two outer on each side barred with white. The two next shightly do. The rest a little white at the tife.

Ingue flat very thin, and slightly divided at the end, at its root, it has fleshy particle like bristles pointing backwards. Front toes joined to first joint. Two front tree outer and inner, respectively a little larger than the back to as. Builds in bushes, chifly Jee US 3. Markary & raspberry, of fine grafs. buys four legs. Sask grey with while and M. 5. black spots. Northly in a projecting rim. harde of mouth red.

Fig. 3 Lingth life - 2 /4. Bill 5/3 - Break. 10 /4 - mouth broad at base 4/0 - inches.

Inidole and outer tree joines to 10 foint. Jail 12 feathers. The wing quills here blue on the outer web; blackish shale color on the inner. Under tide of Tail feathers blackish brawn again state color. To of wrings greyish state color. In the belly and went the blue a lettle see Ud 3. lighter, with a slight minture of grey. Bill very much depressed or flattened. I M. 16. very broad at base. Imgue broad, flat exceptively thin, printed, and divided. Kinds not in bushes of grafs. I have eggs light blue. Lives on grafshoppen and other insocts. Called Hurria Churre (i.e. light blue brids.

21. 18 Tig 1. June 6 th. Fig 2 - June b #. Fig 3. June 8.

Fig. 1. Length 7/4 - 3/2 Bill 1/4 - Brown 15 3/4. Killed near Barub, between Theemut, and the Copper nine Pakree. Called Fluldoo (from Huldee, turmence, The Mango from its color). Throat, breast, belly, vent mis undertail coverts, light yellow. brid . a Vary. of the Golden Fail 12 feathers: in the under part it is light black, where it is dark abone. The oriole. Vol 3 two middle feathers yellow at roots, gradually darkening towards the ends which P. 137. are black. The others as drawn. middle and exter toes joined to the first joint: claws Lee Vol 2 hooked and sharp. maide of aring quills light state color mover wing covertet Pl. 21. bright Gellow. The feathers of the breast have a light grey stroke on the shaft. The yellow patch on the wing is caused by the ends of 5 or b of the rome coverts there being of that color. The outer edge of the three or four longest quills is white. Tongue flax horny and briskles at the end. Builds of this sticks in trees lays & to b six eggs according

Jig. 2. Length 9 - 5 % - 18 dl 1/10 - Broad 21 - miches. Inside of the whole wonig, lead color. Tongue rather pointed. This at the end, and curroing upwards at the sides. Toes divided to their origin. Claws short. hoshed (not vony much) and tolerably shaop. Esses of the enter wing coverts, middle quills, and two or three of the enter quills, yellow. Inside of the thighs whiteish gray. Jail 12 feathers. The two enter on each side have a blueith tringe in the green which is the same as the wing green. The under hast of the tail fathers hight blueith state color. The black of the vorige sphears on a close examination, to have a slight tringe of dirty blue in it. I side of the body, under the wing, green. killed near Barrub. called Elansa. Builds of grafs, in trees. lays two eggs pure white. The under fail coverts large; the two undole as long as the tail: and hided it almost, when setting as drawn.

to its age. June white . lives on fruits . Can be tamed so as to be loosed in the day . I will return at night . has a pleasant note . male and female alike ni color . latter

Traun ver agani. dee Vol 2. Pl. 41.

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Lig. 3. hength 4/2-11/8. Bill 1/2 - Brown 9 5/8. miches. Tail 12. slightly forker. The two outer on each side yellow on both webs / but not on shalf to within 1/2 an inch. Mich konter toe & lightly joines. inner wing coverts yellow with dashes of grey. miner webs of the base. half of the puilts light yellow; rest of guills inside state volor. Tipes of every guilt white. The vines the body. Larger M. 34.

M. 34. ones black, yellow at the tips. builts have each air the middle, the neter web yellow. When closed the wing boths as drawn. Killed near Doongure Putti Dewelgurh. Called Tootee. lives in the sone all the year sean. Builts fine grafs. in small buthes lays four eggs, greyish white. mly 3 vincerquills white Tipped. Fump yellow. only the 3 outer tail feathers as above.

12:19. Fig 1 - June 3 th. Lig 2. June 7 th

Fig 1. Length 5 % - 3/4. Bill 1 - Broad 19/h. inches. Legs feathered to the loes. Claws hooked and vony sharp. It claws a toes open like this willed mean Goongun. Slying about a feak which has snow me it in writer. Seen metry some March to bets. Called Jonulee (from Fore white . i. e white throat) Head, back, in short all the upher fasts brown. Then were dome marked the same but the brown a little lighter. Instably semales. The mouth is like a goat suckers. Nostrils II of this shape. It is only the five outer quills that are so long which are proportionally 2 the his make the thing they did not appear to fly so strongly and swiftly as our linglish swift. Tail 10 lathers.

Fig 2. Light 4/4 - 2 - Bill 3/8. Breadth 9. Kump white hunr wanis coverts black, with some of the feathers tipped with white Luills bown wiside and out. Thiddle and outer the joined to first joint. Tail 12 feathers. Hightly rounded. cass very large. Bill compressed.

Brown over again. Vol 3. M. 43.

Tig 3. Septer 12. Lingth 5% to - 4/10 - Broad 11 % o - Bill 1% o . inches. Tongue small flat, horny, white, and bristled at the base. Unhermantitle very hollow. Sides of body under the voring redsish brown like the nump. Inid, & outer toes joined half way up first joinet. Claws howhere & very sharp. Outer toe mid 3. miner 2 joinet. Horser park of wing quills, light state color on outer web, dirty white on sincer. The white wings short is made by a little white on sincer web of 3° quill, both webs of 4 th & 5 th & outer web of 6 th quill. Has a shall white. Found in the Hills all the year. Tilled at Pasree near fremegur. called Burtoolo's. builts in trees of small sticks & very fine grafs. Lays form four to six eggs, dirty white mostled with red. Nottill pervious. Apparently the grey-backed thinks of hatham. Tool 2. p. q. Wild it eats insects. Called Lutoria in the grey-backed thinks of hatham. Tool 2. p. q. Wild it eats when justable to fly. The whole upper parts are beautifully mostled rock & light brown. refuse towards the security. The chin white, all below to, with very light lithuslosed bars. The upper manisible sleph thy hooks.

Frank over again Lee V. 3 Pl. 21.

Pl. 20. he appoint when Mark holony M. Fig. 1. June 15 th Fig 2. June 15. Fig 3 . Sept 12.

Fig t. Length 7/2 - b - Bill 1/10: Mos ad 16/4 - Killed at Oolker Juries, a high place probably Jooo Jk. troso for a most the or two. Builds in trees. nest of small sticks. eggs two overagain or three greenish. Middle and neter to e joined half way up the first joint. vol 2. Inside of the wing grey slate colour, with a whiteish patiene in the centre of M. bo. The vinner web, making when the wing is open a bar of white in the niside.

Nostrils large his in the tribles. Under mandible angled at the edges. and a est hollow niside. Belly breast, vent. light pinkish fawn color. Jail the feathers.

of the q or 10 outer quills. Ingue boat thick & fleshy at root; rounded thin, & horny at the cut.

I saw one a little different. The white at the tips of the tail feathers was left than in this. That on the wing coverts was dashed with It brown. & on the 11th to 1k quill was a small patch of white on the outer webs, just where the blue & black I tripe and, and it had no white at the ends of the quills. Whether forms age or immationity

Ms. In this the 5th tail feather of the right, & the 1' feather of the left, is not drawn. The outer web of the 1' feather, whould have been more of a light brown, than blackish blue. The blue of the tail & quills is rather too dark. & the shipes on the two middle feathers are too close & numerous. About the middle of the inner webs of the two 4 the x 5ths the black bars are slightly perceptible.

No. 2. Lingth 10 he makes - 3 miches - Bill 2 ho mich. Breadth 2 feet - 4/10 miches. Ingue half as long of too.) of light thigh is inches. Middle too without claw 14/10 miches. Tongue half as long as lill, slender, sharp and forked (slightly). Under mandible hollow, falling in at the sides. Lower part of back, rump, and tail white; except ends of lather which are shightly, vent, and fact coverts white, except the very tips of the latter, which are slightly speckled. Incide and outer toes webbed together to the first joints. Outer toes five, middle four, insur three joints. Inner suspectars white . inside of wing white speckled with your misside of long quills light state colour. The shaft of the outer most wing quill white; those of the others black. Outer scapulars for minermost wing feathers. Job not know exactly which are long making the long appear when half opened, forked in this way. Nothill furrious. Tours in matthy places, all over thindstan. This way.

Lee Vol 2. M. 5%.



Nº 2. 5 Jept.

N. 1. Length 7 % wich - 53/10 mich. Bill 3/10 inch . Broad . 20 1/10 inch Inside of the wing very slight color under part of quills a little darker. Tail 12 feathers, Slightly curreiform. The under part is black on lower half of the quills and white on the and half, quite plain in the four onter feathers on each side in the middle feathers, the white is dirty. On the upper side, the tail is slate color at the roots, but not very dask; growing lighter towards the ends . Those of the three outer on each side are a dirty white . (MB. The breast is rather too pink, & should have had a shade more blue in it. Legs the same) Called Tumen Googee. Formed all over Hinduston, he the Hills they are only seen during the Lik summer months. Builds of small slicks and grafs lays his white eggs. rarely three. N. 2. Length 5% - 5% - Bill 8/10 - Broad 16/10 - miches. mer toe 3. Middle 4. Outer 5. Back 2 Soints. Jail 12 - 3 outer on each side. black 2/3 the from root. rest white. heat two lighter black & lightlead color. This underneath. On upper lide the black appears only in middle of the feathers. he I mud feathers state colour. Under tail cover and vent white. Sides of body Jawn color. Under part of wings lead color, but ends of middle under wing coverts black - Throat & breast prinkish Jayon whom he flying in makes a sortofpause or hover occasionally spreading its tail out like It is rather a smaller bird than the other, but of a more dumpy shape; and when dittory on a branch usually does do very dumpily, sinking its head do as to Appear as if it had ho nech. Called Poorlee Joogee. nett & eggs same as No. 1. This doch abounds in the Hills, + MB. Joogee or Joogoo tee is the common name in the Hills for these and one or two other dats. In the Planis Panduk or Pundook is used. during the six summer months, a few are seen in the writer.

These being not very neatly done, I ir aw Them over again. See . D. 2. 12. 39. 40.

The Impeyan Pheasant. Lungth 1/h. 5/2 - wich - 13 mich - 11/10 wich - 13 med 2/h. 11/4 mi, his toe 2/2 mi, claw of do 1/10 mi . Spur /10 - Sixth round the breast when wrige expansed 1/h. 2/10 in - The description in hatham is tolerably correct, but the plate neither resembles his description or the bird. The sides of the body wooder the wings are black, brownish black & brown neined. The top knot has from 12 to 18 feathers. longest about 3 nich. and his even as drawn here my when the bird is in mestion; otherwise it falls so close to the nech, as to be little pencived. It never stricks up as in hathanes plate. They all have the white patch in the middle of the back, spechled with blackish grey; but it is not perceptible till the wings are capacided. Below this patch it is blackish bonen to the Tail covers. The Throat & breast has more of a blueish than a greenish gloss on the black. The bring quills are black with a blue & green truge . very slight on the greater, stronger in the smaller. They are not perceptible when the wring is closed. Tongue /3 lough of the beak, broad at root, pointed, flat k doft. The roof of mouth has a double him of white flethy undestance , from which hand little fleshy spikes printing back. wards. This is a muddle diged one I have deen them a little larger. I have had 8 or 10 alive at different times, & keen them wild.

N. 1. Length 7 % wich - 53/10 mich. Bill 8/10 inch . Broad . 20 1/10 inch Inside of the wing very slight color under part of quills a little darker. Tail 12 feathers, Shightly curreiform. The under part is black on lower half of the quills and white on the end half, quite plain in the four onterpathers on each side in the middle feathers, the white is dirty. On the upper side, the tail is state color at the roots, but not very dark, growing lighter towards the ends . Those of the three outer on each side are a dirty white . (MB. The breast is rather too pink, & should have had a shade more blue in it. Legs the same) Called Tumen Googee. Formall over Hindustan, in the Hills they are only seen during the Lik summer months. Build of small slicks and grafs lays two white eggs. rarely three. N. 2. Length 5% - 5% - Bill 8/10 - Broad 16 /10 - makes. Inner toe 3. Middle 4. Outer 5. Back 2 Soints. Jail 12 - 3 outer on each side. black 2/3 the from root. rest white. heat hos lighter black & lightlead color. This underneath. On upper lide the black appears only in middle of the feathers. The I mud feathers state colour. Under tail cover and vent white. Sides of body Jawn color. Under part of wings lead color; but ends of middle under wing coverts black - Throat & breast pinkish Jayon whom he lying in makes a sortofranse or hover occasionally spreading its tail out like This rather a smaller bird than the other, but of a more dumpy shape; and where dittory on a branch usually soes do very dumpily, sinking its head do as to Applear as if it had no neck. Called Poorlee Joogee. nest & eggs dance as No. 1. This dort abounds in the Hills, (+ MB. Joogee or Joogoo tee is the common name in the Hells for these and one or two other date) one, I have seen them a light the je used a nave now agas or sen acre at different times, and deen them wild.

this found on the borders of the perpetual snow of the Himaleh; chiefly on the tocky parts. Comes down to where there is vigetation in the mornings and werning, and retreats to the peaks and ridges in the day. Its food is perhaps grafs & insects. for when kept it should be bose in an enclosed yard; for want of which strage should be barred at the bottom, and every day put out on the turf, changing it place several times; when it will immediately begin eating grafs, and pecking at the ground . (probably picking up insects or bits of gravel.) Unless this is some it never. thrives or hies long; but it eats wheat and many other grains. The tints of its leathers vary to much in different lights, that it is difficult to describe its color. The shape of this is much more correct than that in Lathanes : it being rather a dumpy bird; and usually carries its head low, with its nich half sunk into its breash (turkey fashion). The male is called Kresace, the fimale is called Moonal The fimale is smaller vandy white on this & throat. Leathers of nick be wrige . have & colored shaft. a little of the web in each side light brown . rest blackish brown, with a shiplet fringe of light brown. Those of breast & belly, much the same, with moons of the light brown & shoted with the sank brown. Head beautifully marked with alternate dots of 8 ask a light bown. Back & rump the same with narrow virgular bars. The light blue round the upe is smaller than in the male.

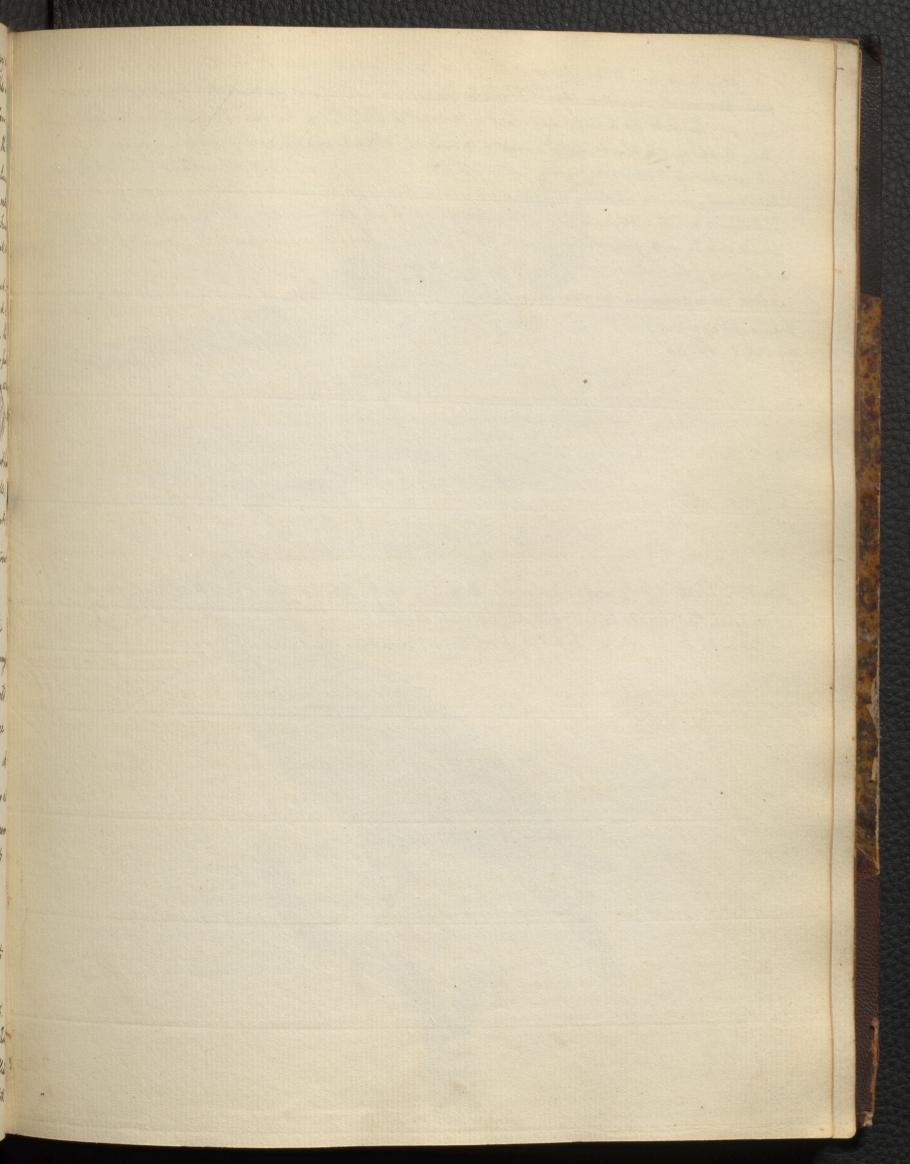


Fig 1. Length 43/0 - 31/0 - 18 road 11/10 - Bill 7/0 - inches. Fail 13 feathers. The two outer on each side, have white except a laye of black to the winer web 3/4 of its length. bread at the root & grown narrower towards the point; and close to the root a little black on the shafe and outer webs. The other feathers are black, with a slight whiteish streak on the outer webs. Tongue small, name and exceptively thin. Northils situated close to the feathers, in a small hollow, and hervious. Inner wring wourts whiteish & light state order. Invide of quills to. Belly, went, and under tail coverts white. Upper tail coverts Blueish black at the troots black towards ends. Outenum, coverts white with greyick brown rown the hiddle. Towards outer part the brown is darker, and coverts white with greyick brown rown the hiddle. Towards outer part the brown is darker, and covert name of the feather leaving only an edge of white.

Called Chamchuree by the Punjabees.

brown over again ag loil or a slight variation Vol 6. 21 316. de Vol 2. Pl. 66

Jog. 2. Length 1 th to inch. 8/2 inch. Bill 2/4 mich. Broad 3 /1 /10 inch. Tail 12 feathers. Jonque flat, broad, horny, black, lancet shaped and split at the end. honor toe 5 middle 4. outer 3 joints. Probably the Camion Crow.

Lingth . From tip of beak to solling on of tail . profising bown the Joh knot & Jul - Lingth of tap knot feathers 2/2 - Bill 2/8 - Broad 18 /4-miches - Killed at Freenequer . found all over thindostom. Called Hood-ood by the Robillas . Thok burya, or Khatkor (names of the word feecher) by Boon & Hill keeple . Belly while , dashed with grey . Vent & univer tail and white . That to 3 to the part of the whiteish faun white . That to be the part of points . huner wing corrects one light whiteish faun color. On the whole guills a patch of white on both what wells , & shafk on middle quills only on vines web. On the wonder guills a patch of white on both what wells . The outer wing corrects are boord with white . Innervoring quills are brownish black . Rump white . Unper tail corrects black . Tail 10 feathers with a bar deohite aeros of whether hair cumic form. Tongue a little flat triangular suches bit of flesh barely fleich long . When wrings are spread the names of white hatches appear regular . When closed , as Dawn , or even more irregular . Nostrile lange & deep close to the feathers.

Apparently the common Hospoo' of Latham . Ost 4 - 1.98.

Called Turkan by the Punjabees .

Apt 3. Mot one Rugth 8/4 - 4/2 - 2/2 - 18/4 miches . The hard & nucle more red than this is .

Apt 3.2. Shot one length 83/4 - 4/2 - 2/2 - 18/4 wiches. The hand & nack more red than this is. In this position 10 1/2 wiches long. A man once saw a nost of moss. on grown under a stone, two white eggs. Drawn over again . Vol 3. Pl. 37.

Fig 2. Lingth 4 - 3 /4 siches - Bill 1/4 - Broad 9 1/10 - miches. Pent k under tail coverts
tong bright yellow. bides of the body light derly yellow. Jail 12. The two outer all white eacept
just the rost of the shaft. The two next the same, with pash of the outer web blackwich brown.

hyond who a tinge of yellow. The two next the same with more of the outer web, is a lettle Itophe
of the unter edge of the vinner. blackish brown. The his middle ones, blackish green ith brown.

The internition webs tipped with yellow. Nostrils pervious. Tongue home, flat, it divided at The
ond. Middle and outer toes joined to the first joint. killed at Tukolee. In the middle
of the will quills both webs are white except the three outer: of which the third has it
when web white. The two outer are without the white, brides greenish-brown. Joes 1. 2.3.4.

left 10.1828. Old one whose quills it tail were more plack capes of Tomer yellow. back more green it barker.

Drawn overagani. Le Vol 2. M. 64.

ingth all Pl. 26 Fig 1" Qut 22 elyn, ored in Tail thin it he deep Hookol (hpupa Epops). un, itali Fig 2. October 4 th

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er tail iteis.

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2.3. der

Tig 1. Length 8-10- Bill 1/8 - Broad 17/2 - inches. Breat light punkish blate color. Belly do but very light. Vent & under tail words light stilly orange. Jail 12 feathers as or awn. The white wing shot is made by the mores web of the 2°, both webs of the 3° to 9 the winde. Me white of the mede of the wing; blackish state color. miner wing coverts a little dasher. Include and online has joined to the first joint. Outro I had a winner 3 joinets. Little at Jukolee. called kuryin. Norther large, round, hid in the bristles. Tongue short of this whape, thick tofk, with a little hom at the ond. Juid to be particularly fond of nie. I certainly saw many in the new fields. In the plains called Müher, said to cat miseets and wen small brids, as well as failts and grain. - I have seen others in which the bounish. green on the back, comes much lower down, leaving only half as much of the rump ofor All the tail feathers are the blueish state color at the roots, more on the rumer than the outer well, forming the black stantingly. The two outer feathers have very little of it; the next a little more the hill the two middle feathers as drawn.

Graun overagain La Ool. 3. Pl. 61.

Fig 2. Length 4/8 - 2 - Bill 3/8 - Broad 9 - inches. Tail 12. a little curreiform. Vent whiteish yellow with a reddish bown truge. The tail ordinary dull, but appears firey when flying in the sun. Under part of quills a little lighter than the when. Imque horny, broad at base, sharp, very flat. Incidele and onter toe joined to the 1º/orist recasional darks at the surface of the water, apparently catching insects. It has the rushing of the robin. Called by the Hell people Gover Chendia. Vaid by some to be the female of Fig 1. Pl. 16 - builds a small round nest of fine roots of grafs, in bushes man outer wing coverts whileish.

Pl. 27. Mateu of the the may ani m lee.4 chape cestan and in brownie Zuny. an h et; WAY NO Fig 2. Octo 11#

Light known, all down both Eggs. The feathers on the back have a fluid, greenish gloss. The belly breast and wort, same as back; but the lower part of the belly, a vent feathers pringed at the tips with light brown. Under tail coverts large like the wipper; color that of the quills. Sape very large for its beige. Tongue broad at root, flat, pointed, divided at the end. Nostals have a projecting nim all round. Threat white like that of Fig 1 11. 20. claws a toes the same as that also; except that in this the forth toe can be turned backwards or forewards. legs feathered to the toes. (Mr. The lyle's too black, it should have a dash of flue. Inner wing coverts light brown: shiphly fringes at the tips with whitey brown. This is the male. The finale is a little smaller, not quite so dark coloned on the back. All the under hards light blackish brown; which is also the color of the rump. Build under the eases of houses, numbers were figure about Turbolee and Pao (between treenuguer and them.) Called Bansence (a common name for the allower)

Fraun overagain dee Vol 2. M. 33.

Lingth 43/4 (prefing down the topknot) 35/8 - Bill 3/4 - Broad 9 3/4 miches. Belly & sides greenish, grey ish white. Went & under tail coverts bright light yellow. Under side of tail feathers blackish date color these white as above buside of wings dirty, greyish white, with a slight tringe of finish. Tongue sharp, thin, and divided at end. Include and outer toes joined half way up the 1" forist. outer 5. midsle 4. niner 3 joints.

Grawn over again Les Vol 2. M. 12.

Lingth 8 % - b - Bill 1/8 - Broad 19/8 - enches. Burnep white: Jail 12 feathers, Hightly uniciform. The woor of the under side a little lighter than on the upper. The blue & black stripes of the wing are only on the nates orgers of the quills, except the two or three highest small feathers. The wings close so as to hade the lower part of the back must much. The black of the inner quills, & of the patien under the upe, has a account slow neft which I could not microtate. The lower half of the outer web of the or b outer quilly light brown. The two innermost quills are redsich brown on the inner web. Imque broad at root, pointed, very flat, & divided at the end. Nastrils large, round, and only half hidden by bristles. Called Kurryn. Builds in small or large free. The white of the sent, rump, apper to be took of the sent, rump, apper & under that coverts is peculiarly delicate.

Fig 1. Longth 43/8 - 27/8. Bill 3/4 - Broad 10/4 - inches: Inner wing wests color of the breast, but much lighter. rest of the inside of the wing light blueish Slate color . sides of the body , rump, vent, like the breast. Jail 12. the two middle pathers black on their inner webs nearly to the nots. on their outer 2/3 of The length from the ends. edge of the 2 outer quills fringed with black as drawn. Jape goes deep into the head. Touque thin, horney & divided at the ond & has the jointed hook. Ears large. Under side of tail like upper but colors not so bright. called (in Buttol Nipal) Dhootia. builds of grafs on the ground at root of bushes. lays four aggs white spotter with blackish & reddish. This is male. Temale all blueish except on breast which yellowish red. works its tail when moving like a robin. Middle and outer to emembranes to the first joint. Toes 1.2.3. 4 joints. Forms in Sutammerpoor district. Called Kal churree. builds in branches of trees. nest of grafs. Lays 2 eggs light green. For the female der Vol 3. Ml. Fig 2. Febry 22 3. Shot a live just like in shape & motions. widently a young brod of lash season, from the doft ness of ets beak & claws. Upper parts all blueish state votor, with the ciges of quills like this. tipe of wing coverts white under parts nines light ash, & blueish state color. Tail white where this is reddish from light blackish where This is black. probably a find years bird of this kind. Lee Vol 3. Pl. 24

Pl. 29 ite: 4 Fig 1. Octo 9 th on they nge. Lelia Straight the 11 Fig 2. Nov 24. . La V.3. Pl. 24

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Fig 1. A species of dove . Killed on Soorhunder Debee .

Length 9'/8 - 5'/2 - Bill 1. Broad 22 - inches. Called Bun Soogee. i. e wood dove, in opposition to the Soogees in Pl 22. which are alway found near villages and cultivation. This sort is found in woods on high cold ridges on which know falls in winter. The back & rump are light lead color, with the feathers shiphtly fringed with light brown. As it usually site the wings meet and hide the back. Tides of the body light blueish lead color. Vent white with a slight dash of blueish gray. Under tail coverts pure white & long like the refler. Tail 12. all but the two middle tipped with white. Color of the under side of tail blackish brown. Under side of the guills dull brownish state color not vony dark inner win; coverts like the back, but with a gloß & without the fringe. Jail vony cunciform. The light color on the back part of the legs, appeared to be from using that hart in ditting.

Fraun over again de Vol. 2. M. 42.

Fig 2. Killed near theme.

Length 33/4 - 4/8 - Bill 5/8 - Broad 8 - inches. Middle toc joined to the outer to the sije joint. Under side of wings light greyish slate color. It ides of body light faun color. Forgue hollow homy divided at end. a joint near the root hike this from which two bristles point back wards Tail 12 feathers. It is generally found hopping about among low bushes, or tufts of long grafs. The throat is a pure delicate while with a tinge of faun color towards belly a sides of breast, gradually darkening to wards the wards the west. Tail coverts a little darker, enclining to dusky red.

Lee Vol 4. Pl 51. not g. but a fig.

Pl. 30. Jig 1. Octr g k back lly vii Hach No 2. Nov 16 Jig 1. Tength 11 1/4 - 4/2 - Bill 3/8 - Broad 23/4 - engles. Apparently a species of king fisher. hilled in Sukneana just out of the Doon. Tail 12. currisom. The feathers of the back and onter scapulars are barred almost equally with black & white, but the former provails to the quills and hul, the grown is black, barred & spotted. The british of the former provails with the guills and hill, the grown is black, barred & spotted with light gray ish black. The belly & vent are pure while, but are so flat, that in this view of the brid only a little of the vent is proceed. Under side of tail & quills, marked lited the appear lack hing light blackesh gray, where the upper is black. Nothils a small than ship, curred. The middle too is joined as far as its 1" from to the inner; as far as its 2° to the outer, making a flat foot underneath. Times wing coverts while vlightly spechlad with gray, mouse the should or a little more is, & with black. As the white of this brid is track pure & delicate. Tongue broad thick at not, fleshy /2 or 3/4 mich long. I this brid is rest lays four copys where like he ofte Muchese-bag (fish tyger) builds whater stones lays four copys where like itself. hest of earth underneath, fine grafs above, generally agained the tide of stone like a swallows. Male & funale said to be alche. I saw known all affection alche, but only short their one.

Grawn again Le Vol. 2. M. 16.

Fig 2. Length 5 1/4 - 1/2. Bills 1/8 - Broad 9 5/8 - miches. Tongue a little flat three cornered hit of flesh. Lides of the body, & unser wing coverts, like the belly. Inside of wing quitly light slate color. pinkish on the inner webs near the root. Toes joined as in Fig 1. above. Jail 12. when i hread a little cunic form; but closed, it appears pointed, and the wing coverts above and before nearly covering it. The light blue on the rump and back is of a silky glossiness which makes it glance brilliantly in the sum.

Drawn again be Dol 2. Pl. 61.

Pl. 31. ach! ly a br. 40 九 y with Fig 2. Oct 27 # Common King fisher (alcedo affhils)

Fig 1. The Jungul Moorga. Jungle fowl in the Hill dealect Bun Lookera. ic Forest cach Longth. 14 - 9/2 - Bill 1/4 - Broad 28 - inches. Found all over furthwall, kumorin the Majmuhul Hills, and wary part of bridia where there are woody Hills, he feathers have a ragged appearance. Belly vent & under tail coverts black. Under side of the tail much more black than the upper. The backles over the rump have a little black green down the mille of the feather near the root, while the webs there are long ragged. whitey grey . The yellow. brown wring patiek is made by half of the outer webs of the nines half of the quills being that color. The outer half quills are black, but shut under the others. Jail 12 feathers Thighty eunie form. while the text coverts are to lying over the tail in this way. The two long feathers properly belong to the text coverents - Their former black, tolerate, thank. middle too membraned to both the others as Tongue flat & thick at the root, coming to a horny point. nearly as long as the bill. Lides of the body black. Of course birds differ in slight possits of have been some without that you of short hairy feathers or hackles over the eye, perhaps from age. I shot me that was only 13 miches from tip of heak to dettring on of fail while the tail was 13 /2 miches , and the speer (he had only me, perhaps from some accident fighting le) a little more thou an inch. Some have not the colors so bright. Ms. Theupe's more mange how MB. The reddish brown of the back should have been continued a little higher up. I ragice that brown species flat brown species thick, and fleshy at the root-ending in a horny point, Ingice that much donger giving the lind a feebler appearance and have part of the wattle of a light cream colour, in other respects the same but the colors perhaps more brilliant The blackish-golden purple-green on the wing has also a tinge of bluish purple.

Lingth 5/4 - 4/4 - Bill 1/8. Broad 12 - unches. Tongue flat, horny at the end and divided. Billy color of rump and vent. Middle and outer toes joined half way up the 1' foint. Ears very large and low down, surrounded by black feathers with white tips. The yellow on the quills is only on the outer webs. inner webs blacking that color. under side of wing quills greenesh state color. sides like the back. inner wing coverts the same. under side of tail marked like the upper. but colors not so bright. Tail 12. the 5 left ones not orawn. Hound in the Doon

dee Vol4. Pl. 26.

Il. 32. Fig 1. Octr 19 # Red Jungle-fowl (Gallers ferruginus). 5/4-23/4 Jig 2. No 15.

Lifted near therdwar. I saw two together apparently aluke.

The two middle pathens of tail are as described in Latham. The next two are like the two, middle, but with left black. The two next, or fourths have a black of fort on onter web. and in this the left feather had another on the ciner web. The two seconds and thirds wholly brilliant yellow. The two outer have a shipe of black on the outer web. The niner: very name, and this of all the quills are yellow. broad & bright towards the niner: very name, and almost white on the outer quills. The short (yellow) on the wing is made like that of Fig 1. Pl. 19. Inside of wing light slate color; but the viener wiles of quills yellowish near the root. Inner and niter wing-coverts bright yellow; but fast of the shafts of time of the outer are black. The shafts of the tail feathers except the two outer, are black in the middle. Hest of the bird, brilliant golden yellow; but the back in some light, has a tringe of blay light blackish green.

Long the by o - 3 /10 - Bill 1/2 - Broad 1b/2 - wiches. .

Songue flat, homy at end, & briskled, near the root two briskly bits of flesh on the whher fart of the tongue from backward.

That one Deer 23 its tail had the 2 middle feathers - like this. The 2 fifths had only a shot of black on their inner webs. Nest wholly yellow. The yellow at the tips of the quills was not so bred.

Drawn again See Vol. 2 Pl. 22

Tig L. Nov. b. Length 7 3 - Bill 1/8 - Broad 16/8 . Killed in the Born . Jail 12 ony slightly curricform. The two outer white at the lifes & about an inch down the inner web. The 2 scents white on /4 mich of the 4/45. The two 3 the 1/8 & 5th. while at the calrene 4/45 . The two outer dark brownesh green. Somering lighter till the middle feathers which are as trawn. Acrofs the middle of the quells on the under side, a bar of white, made by cash quill having a patch of white on the inner web. The larger miner wing coverts are brownish black tipped with white. The smaller is are pure white. Lides of the body under the wings like the breast. Belly white. Vent & under tail coverts to . with a very slight trings of cream color. & the catreine lips of the leathers are light brown. If the outer large wing coverts. those near the body are tipped with light brown. The others are patched in the middle of outerweb with light brown both light brown. The others are patched in the middle of outerweb with light brown orscents are make by the ends of the pathers being that light brown bar I while the ends are black. The blacketh brown orscents are make by the ends of the pathers being that color.

Lee Vol 2. M.g.

Pl. 33 Fig 1 . Och 27th. Black-headed Orioles (Orioles xandhornes). Fig 2. Nov. 6 Jig. 1. Length 8/2 - 5 - Bill 1/2 - Broad 33/4 - inches.

Jail 12. The two middle light pinkish state color. The rest thightly so on the outer well this on upper side. on under all white. Upper tail coverts. All the parts that so not appear, are bautiful pure white, with an excepsively light tange of blueish on upper part of breast; and of yellowith on belly vent & under side of tail. but so light that the lower half of neter quilts, which has light blackish state color. Mouth more like a goat suckers than a hawks. The under side of the eye is sunk in a deep hollow, so that fronting the bird the eyes appear vicely fronting you as in an owl. Called by the latans, Joormootee.

Drawn again Killed at Kishnamugan it is also formed in Hindstan See Dol 4. Pl. 34.

Fig 2. A species of wood pecker killed in the Sheree pass.

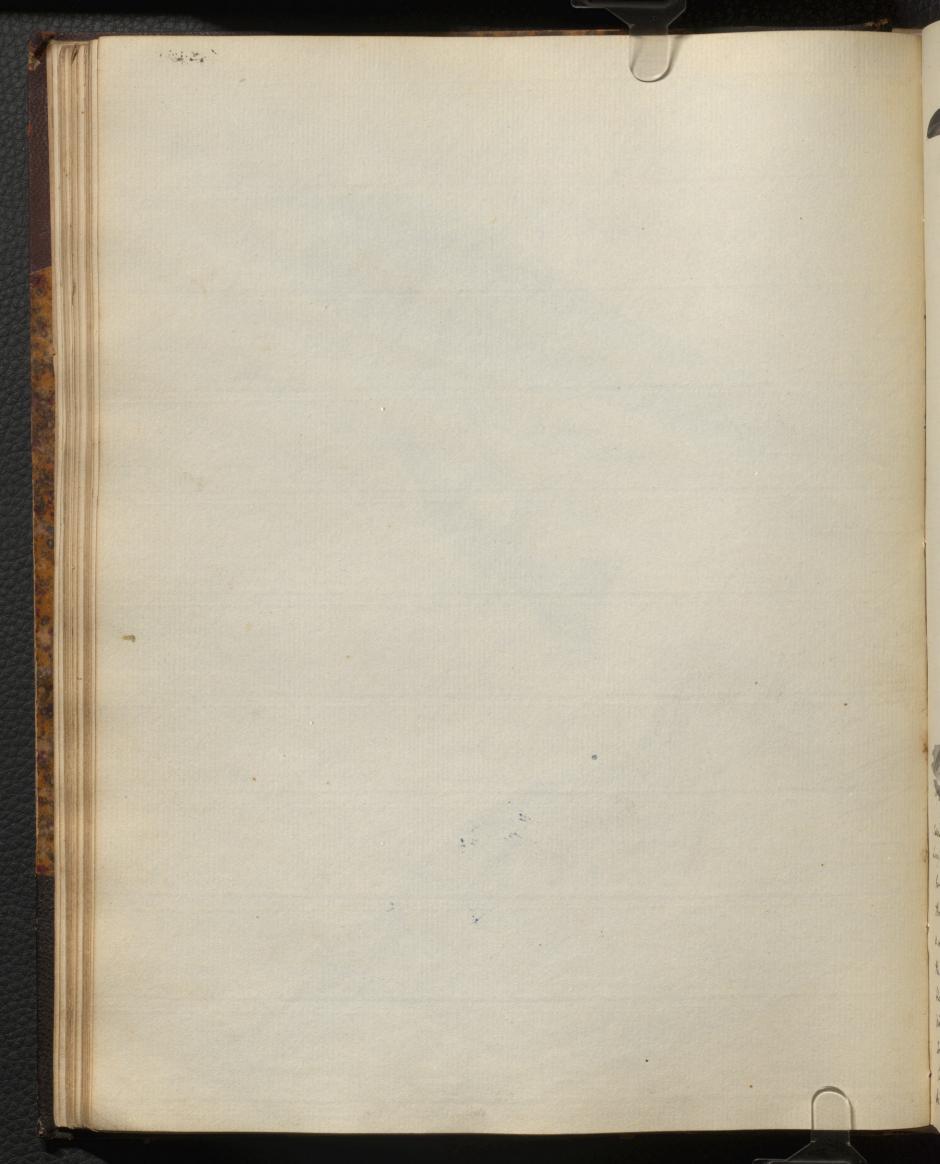
Lingth 7/2 - 3/8 - Bill 13/8. Broad 16/2 - inches. The threat feathers are

simple with lighter brown. The breast, belly a vent are a shade darker brown than
the back, and have none of the black bars. Under side of wings & tail, like
the upper, but colors lighter. Tongue round, soft, horny for 1/2 an inch at the
und and barber slightly. will project 1/2 inch beyond the point of bill.
The legs & toes, large strong, rough & scaly. The inner back toe not above
1/4 inch long, & the claw so short as to make it apparently useless. Front outer
toe 3 inner 2 joints. joined together to the first. Called Shat khor (wood-cater.)

I suspect this to be a semale, for I saw a pair, the other appeared to have some brighten
color about the body. P.S. The people tell me that this is the semale the male being
much the same color but having a black exest.

brawn agains Lee Vol. 2 Pl28

Pl. 34 - Fig 1. Octr 27 # ide Fig 2. Nov 27 ..





Lingth 8/4 - 5% - Bill 13/4 - Broad 253/4 - inches. Tongue, narrow, exceptively thin, flat, honey for half the said lingth, & fringed at the end. Inides greenish brown. Breast like the throat, but the white on the shafts of the feathers, get left bristle downstrown. Belly, vent, a univer tail erverts, glofy light greenish-blue inner wing erverts the same. Jail 12. the inner well, much lighter than the outer, in the light flue. in the lark blue, the reverse, the nines well being lash purphish black. Less k toes inty yellow-ochreish. claus black. Foes 1, 2.3.4 joints.

Some all over Hindowston. Male & famile alike. Lett in a sumply pasture ; Thes in an awknown Happing butterfly work of way; Leresching boudly. apparently lives on insects.

Lee Ool. 3. Pl. 60

Lingth 8/h - 3/4 . Bill 3 - Broad 17/2 - wiches. The gape very broad . Both mandibles hollow. The white of the chin , continues down the threat and breast.

Belly & vent same color as head. Inner wing-coverts the same, but a shade lighter. Where the white aspears on one web of the quills; on the under side, it is white both webs & that. The rest of the under side of the quills blackish brownish slatecolor. Lides of the body same as head. Legs short Light vermil lion on under part; blackish on front part. Toes as those of Pl 31. Jail 12. a little cunciform. Under part blackish brown slate color. The blue on the wings and back, has a bright sithy gloss. it is difficult to draw, as it in some lights appears green, in other blue, in others greenish blue. and in some lights appears to have a violet tinge. It is may be the half white feathers of the wing.

Fig 2. Length 3/8 - 13/4 - Bill 1/2 Broad 7/8 - inches. Jail 12 a vort of very slight double rounded fork hand like this. Immer side of the wing lighter than the belly, color the same. Upper side of tail and rump like the back. Tongere thin horny, slightly divided, and has the jointed book. All three toes membraned together half way up the first joint. Called Chicke being by Soorhus. builds in holes in trees. Lays four eggs white, nest of pathers, of strips of the bark of the Thaera tree. Male and semabe alike.

Pl. 36 While breasted King Eisher (Haleyou arrighmensis). Fig. 1. Nov16 Fig 2. Nov 24.

Longth q - 4/2 - Bill 1/6 - Broad 22/2 - inches. Found all over Hindostan. Invide of the wing light bluish Natecolor rather darker on the guills. A slight dash of yellow on the lower part of the belly. The under tail coverts large . each fear their reddith brown with a white tip; but from their over lapping each other, affects as drawn, when sitting. The under side of fail is dark blackish slate color, when it is yellowish green above; and color of the belly, where it is slate colorabove fape broad, and throat very large. Tongue rather small for its tipe, compare with other pidgeons. Called Elinsa by the Hill people, as well as Pl 19 7; 2. The toes are broad at the bottom, almost as if made so by sitting. Builds in trees, lays two eggs pure white. Nest of grafs. Male and female alike.

Fraum over again Lee Vol 2. 14. 25.

Fig 2. a species of Kingsisher. Filled at Hurdwar.

Langth 9 - 23/4 - Bill 3 - Broads 17 /2 - wiches . The black marks appear in this irregular way; but they are at the onds of the feathers, with a slight fringe of white beyond. Some of the feathers are pure white mixed among those with the black patches. On the breast are two bands of these black patches feathers about halfan inch apart. The upper the broadest. Two or three of these black patches on each side of the belly. The rest of the under parts pure silky white. The inside of the wing the same, except the ends of the quills, which are light black where dark above. The orter quills are black ended on both webs, one or two having white tips. The middle quills are black ended on outer webs and a little of the inner, & The vines quills have black patches on asiter webs. Tail 12 Cunciform. The middle feathers while at roots and ends, black in the middle. I onter on each side the same, but patched with black in the middle. Under past the same, but light where it is task black above. Toes like the other kgfrs a few pages back. - Common all over India. called by the Bengalees Junga Doobee (river diver) It usually carried its beak printed downwards whether sitting or flying. This showly , and frequently hovers over the water like a hawk generally seizes its prey from a hover.

Pl. 37. nepun Fig 1. Nov. 19. 1 ml, thy Arawn again de lol 2. Pl. 15. Fig 2. Nov 20 Light 1. Length 8 - 4 1/4. Bill 1/2. Broad 18 1/4 ejeches. Tides of the body like the belly. Under side of wings wholly light black. Under side of tail like the upper, but colors lighter and not so brilliant. It feathers slightly unneiform. The two middle feathers are edged with blackish on both webs: the others only on the outer. all only at the end has a vilky gloss outer toes joined to first joint. The black of the head has a vilky gloss and a tenge of blue. The outer wing coverts have it also but not so strongly. The body feathers are blueish black at the roots, k white in the middle; so that if the feathers are displaced, it appears to have feathers of white. but not in the briss natural position when alive. Tongue flat then, k divided at the end. Formed in Gurhwall.

See Vol 4. M. 24.

fig 2. Longth 83/8 - 4/4 - Bill 17/8 - Broad 17 inches. The tingue round, & can project 3 inches beyond the tip of the bill. it is soft except 1/2 an inch at the and which is permished with small barbs, & homy. Teet & toes strong & large. Outer front has 3, winer to 2, outer back 4 & winner to 1 - joint. The whale of the under part is a mixture of yellowish green, light blackish brown, & dirty white . each feather is fringed with the first, bordered by the second, & is dirty white in the nidsle like this; while the shaft is brown. The quills are blackish brown, with what is the shaft is brown. The quills are blackish brown, with white spots on both webs; i e the outer: those nearer the body are so only on the inner web; the other being dirty yellowish green. Jail 10 - under fast like the upper, but a dirty brownish large over it.

I shot another in company with this, precisely the same, except that where this is red on the head, that was black with dark cinercous dashes. Although the contrary would appear most probable, the people assured me that that was the male I this the semale. Both appeared full grown as to the hardness of the beaks & claws. Nostrits this shape buried under projecting hairs. The tongue seems to sit into a hole at the root of the under mandible.

Pl. 38. Fig 1. Novr. 22 " 'e of then 2 and Fig 2. Decr 4.

The Florikin or Indian Bustard of Latham. Lee Vol 8. . 1. 358. Longth 19 - 61/8 - Bill 2/8 - inches. Broad 3/h 8/4 inches. Longth of thigh foint. 6/4 - lower joint 5/4 - inches. Middle toe 15/8 inch. Girth round the breast including wings . 16 1/4 inch. of thinnest part of nech 3 inches. huills with black shafts. The two outer black on outer webs and tips. next five have black tips. The innermost two guills are black on the inner webs, with tipes mothled, and blackish state color on outer webs. next two black on inner webs alone. next two partially so . The seventh only on inner edge. The quills shut under the wing corests; only the tips of the two or three innermost quills being visible. Inner wing wests black, with some small patches of white towards the 2 Janit. and of some of the middle quills are black on the inner webs towards the roots, on the under side. Tail 16. The two middle mottled like the upper coverts: The two next the same but with a little white at the tips. The others are chocolate black, with half an inch of the ends while and two or three irregular bass on them. Upper tail coverts so long as to hide the tail, which is slightly rounded. Tongue half as long as the bill. soft fleshy, flat at top, rounded at bottom; coming to a blunt point. Toes 1.2.3.4 joints.

NB. In this the head is slightly too large, the neck a little too thick, and the legs not quite thick enough, in proportion to the body.

Dec Vol 4. M.b.) Dawnagain.

Pl. 39. reart . black me. ribble the high rooti, hocdale bast bast thy the Nov. 29.

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Longth. 15% - 9 (M. The tail is set on much higher withe body than it appears in nature) Bill 1/8 - Broad. It is in. Breadth of gape 1 1/4 inch. Tongue small, flat, flesher. The under side of wing chiefly cream color. Lasher with light brown patches, a inequalar bars. Joil 12. Color much as the order wing covered, but less of the dark, a more of the light brown about the feathers, except the two middle which have much dark brown. it decreases towards the outer feather upper tail covered very short. The guills, on their outer side are light brown on the inner, dark on the order webs; both barred with black. The feathers at the back of the head are mostly dark brown and black, with small spots of light brown intermined. Those of the neak (behind) and back, are chiefly light. brown, with a Hack patch down the middle and some mostling with black in the webs. Tides of the body light brown, frethily marked with circyular blackish bars, like the outer side of the thigh.

Killed in the Boon. builds in trees. nest of large sticks, and small. lays & large eggs: mottled black, reddish brown & white. The eggs are conditioned as good for medicine for bad eyes. Called Hokra Cheel; the natives considering it among the Cheel or kite genus; and say it is strong enough to, and does hill wild cats.

Hands in an ordinary position about 17/2 inches high. The lower joint of the leg, felt, toes & claws are very powerful. latter very skark. Thickly Feathered to the claws. The legs look more like those of an animal than a bird; and are correct in the drawing.

Called also googoo (from a resemblance to the noise it makes.)

Bottom of the feet and claws very rough. Middle and outer toes, strongly membraned together. The feathers or cars project 13/4 inch beyond the feathers of the head.

Pl. 40. spean. ngu ed with or wing , crey eter/u t brown lather . tiof light. ackm lachin ank. e natur ng omit . Thick thuna aned tijl

tig. 1. The Pied Horn bill of Latham. Vol 2. P. 316. "Longth 22/2 - 13 3/8 - Bill 6 3/8 - Broad 42 1/2 - inches. Lathanis description is correct. but his plate XXXIII is badly done : neither the tail or neck being long enough in proportion to the body; and the neck being too thick. The tail coverts are very short, the upper not being visible when the wrige are closed. Middle and outer toe each 3, unner 2, back 1 joint. Middle toe joined to the inner as far as the first, to the outer as far as the second joint, making a broad flat foot like the king fishers Pl. 31. I middle like this . The dotted line showing the jorning on of the Back into only Jound in the Doon, No the forests at the foot of the Hills. Called Dhunes, Dhoee, and Bunrao (the latter signifies " King of the forest" and is by the common people often corrupted into Boondal.) Builds in trees . of sticks and grafs. The hind head feathers of the female do not project quite to much, otherwise the same. Usually seen in pairs. sometimes five or six together . Hier heavily flapping its wings quickly for a little way, then sailing smoothly for a little, with the sonings stretched out, & so on; but without dipping in The Slight. makes a low should shricking noise, which is heard a long way. During the first year the bird is all over dull brown, & arker above and lighter or dirty white beneath, & has scarcely any projection above the bill; and may be seen a hundred together. moving quickly from Tree to Tree. Full grown it is rather shy. MB. Both eye-lids are furnished with bristles or eye-lashes. Two or three are at the corner of the mouth, & also over the nostrils. - Ms. The two first quills are black Ke. Inside of mouth black tonque 1/2 mich long 3/8 troad , rounded . I very thin . Depth from the hind point of the projection to the commencement of the chin feathers 3 /8 wich. Theyellow patch under there is a bare skin. Lee Ool 4. M. 30. be seen many (sometimes 100) together, flitting from tree to tree, not sky and evidently the young birds of some sort from the softmits of the bill and clause it measured along the upper surface of the bill; not over the projection.

Pl. 41. Dec. 5th 1827. Fig 1. ther the being . en the Middle! your inner in min aily otherw apping the earth ath, l togeth rec an Mak thin hin

Length 31/4 - 23/3 - Bill 1/2 - Broad of 1/4 - inches. The black of the breast, extinds to the vent, and is broader on the belly. Sides of the body are light greenish yellow. Under tail-coverts the same. Under side of wrigs light blueith slate color, winer weles whiteish. Under side of tail light blueith slate color. Joil 12 as traum. Some of the body feathers which hang over the wing coverts are blackish blue the color, fringed with greenish yellow. The roots of all the body feathers are ragged light blueith slate color. Mrs. The yellow of the breast is a little too dark.

Called by the Hill people (Nipal) Chiskoteea. Female much the same but not so high a crest. builds in holes in trees. nest of grafs. usually 5 eggs, white with dirty brownish white patches.

Lee Vol. 2. M. 19.

Fig 2. The Common Starling. Dol 4. 1? 2.

Length \$\frac{1}{2}^2 - 2^3/4 - Bill 13/3 - Broad 15 3/4 - inches. Found all over the upper provinces and in the Doon. Called by the Putans Tilier. Only seen during the cold months. Jail 12. the two middle rather narmound posited.

The Dol 3. 11.31.

N. 42. etindi Fig 1 . Dec. b . ellow. cles who the body Imigu, h white but n hite with - the ly seen position Common Starling (Sturnus vulgaris). Fig 2. Vect 6.

Longth 3/2 - 23/4 - Bill 1/8 - Broad 6 3/6 - inches. Belly went, sides of body & under tail coverts, greyish, greenish, yellow. Under side of tail light black. To of wings still lighter. The nostrils are oral, abrupt on the root side, gradually shiding into the bill, on the point side. completely overlapped by a black membrane, which is what appears in the drawing. Colors and shape correct, but the former have in nature a brilliant glop, particularly the blackish golden green of the head, and golden green of the tail coverts, 2 middle feathers, and edges of the others. Littled in the Doon. Tongue can be made to project 5/8 inch beyond point of bill.

Mis The one I killed had but one middle tail feather. but there appeared to be the place of the other. Drawn of the natural size. Mis. Shot one on Teley 22" appearently of leth year. Where this is red. that was all brown, with patches of red just appearing. Tail all brown, & the 2 mid feathers no longer than the others.

Fig 2. Length 4 3/4 - 13/8. Bill 9/10 - Broad 10/2 - inches, Lower part of back & rump, has a glofs of yellow over the green. Two fore toes joined to the 1" foint. Larger has 3. smaller 2. Larger back 4. smaller do 1 joints. Tongue small for the month, this shape very flat, honry Sape very broad. Tail 10 even. Teilled in the Doon. Called Lat bury (wood carpenter. Lee obs to 1913. Fig 1.) Jund all the year. fuilds in hollow trees of feathers a hairs. lays 4 or 5 eyes. white. In ale and females alike. the Osl 2. [1.58.)

Length 37/8 - 23/8 - Bill 5/8 - Broad 8/2. Tail 12. rounded. plumage at srawn. Gape wide for the size of the bird. Toes 1.2.3.4 joints. Tongue flat. horny & fringed at the end. Both mandibles hollow. Tongue has the hooked joint. Lilled near Mohun Choki. Middle and outer toes partly joined partly membraned to the 1st joint. The upper mandible has a very slight notch near the tip. I roun of the natural size.

Pl. 43. by him wings , he bill, Fig 1. Decr. 9 th. appean iant coret ade to e of the , that un er than t back h Largue munt. Filled in le year. le alike ge al Jongue has d outer mdikk Cospersmith (Xantholama hamacephala). Fig 2. Ded q. Fig 3. Decr. 29.

Longth bif4 - 9/8 - Bill /2 - Broad 16 3/4 inches. Jail coverts rather short & the color of rump & belly respectively. Two fore toes joined half way up the first joint. have front toe 3. Imale 2. Large back 4 imall 1 foints.

These vary much in intersence of color, having the set of the hear lighter. the black uni reservable hear hash horower. the nuder mandible lighter, breast & lelly more yellow. a edging of quills much narrower & almost white. **

Jel Vol 4: M. 10

Fig 2. Jany 12 th 1827. Length 7 1/8 - 9 5/8 tinches. Differs from Fig 1. in the color of some parts of the two fifth tail feathers & their tips are bright yellow instead of light blue and white. The ents of the middle feathers are bright yellow. The red on the wing is much duller in other respects the same le Uil 4 Pl. 10. #

Fig 3. Length 7 - 10 - Bill 3/4 - Broad 21 3/8 - inches. Under parts wholly light greenish yellow. inner wing coverts yellow, with a very slight tinge of green. Inner web of quills blackish brown after darhish green, with a slight yellow tinge at the edge of the 3 outer. Indes yellow eyelist orange. Jail 12. Joes 1. 2. 3 & joints. Two front joined half way up the 1st joint. See Vol 4. M. 9.

The sort is perhaps the formale of Fig 1. it is like figure 2. but the tail like Fig 1. nor has it any sed on the wing. Bill has upper mandible yellow, lower trity homnish yellow.

of it the feathers are a shade darker. The has of all differ in being lighter or darker having more or less yellow, green, or blue in the color which in different lights shows more than the other being compounded of all three.

acriker or lighter, with more or less yellow in it, and sometimes with a time of blue particularly on the upper tail coverts. The ends of the long tails feathers, are sometime, yellowish and those of the shorter ones sometimes whitish. The head hair sometimes whitish, who head hair sometimes sometimes wisher and not so broad. The edging of the guills sometimes broader, sometimes marrower; sometimes bright yellow sometimes almost white. The red on the wing sometimes more or less; and darker or lighter.

Pl. 44. Fig 2. thost ind you i manh & Blosiam-headed Parrakeet? مام کم ما (Psittacula cyanocephala) of some Theirty le feather to the san th yellon ih bown low. with elln. Green Parkakeet (Psittaeula Krameri) Linkle 8 Blossom-headed Parrakeet (Psitfacula Cyanocephala) being the on hound Fig 3.

Tely 23°

1828Longth 7/4. 5 3/4: Bill 1/2 - Broad 22 - inches. Under part of wings and tail like the breast. Gape 3/4 inch broad. Tongue. This shape, thin & fleshy at the root. very thin, horny and fringed at the end. Vent and under tail coverts pure white. Killed in the Doon where it inhabits during the bold - weather. In the vummer it goes to the borders of the blimalch, where it breeds; building on trees, on maccepsible rocks, so that no one has seen its eggs. Called by the foothers (in which province proper it is also foised) Chanchur. The female is a little lighter color. Considered good to eat. Joes very rough and scaly. Iniddle 3, outer 4 joints. winer 2. Back 1 joints. Middle and outer joined to the first joint. It flies domething like a woold becker.

2by 29th. That me at Aujubabad. The which that the edge of quill, not so broad. norwas there so much while at the out of the tail; which has the appearance of hence of horsened by rubb.

There so much white at the one of the tail; which has the appearance of hence shookened by rubbing. The tongue was my divided, not pringed. Its feathers have a course wiry appearance. It has a film over the eye from forewards.

Grawnagain Lee Vol 3. M. 63

Longth 4 1/2 - 1/2 . Bill 1/4 - Broad 12/8 - inches. Rilled at Flurdwar running up the rocks like a creeper. The outer half of the greater wing-coverts are scarlet on the outer, black on the inner webs. Quills the same two thirds of their length from the roots caceful the outermost and the three inner. The four outer quills have each a large white patch on the inner web, about 3/4 inch from the lifts; and a second patch about an inch above that. The fifth quill has a small patch even withthe latter patch about an inch above quills mearest the body, the three next have a small like for this light from patch even with the upper patches above mentioned. In this light from blackish slale color. Inner wing coverts black, dashed with pink. Inil 12. the two outer black at the rost-half, the rest white with a light slate colored fringe. The two next the same, but only a white patch in the inner web, instead of being half long deep dent, covered with a black membrane. Inque bayonet shaped at the not, a fleshy rest horny, black narmo, k very thin, divided at the end. not quite so long as the bill. Lingth of back claw 1/2 inch.

See Vol 3. M. 2.

M. 45. ed and Fig 1. Decr. 11 th & flethy tail un ather · brilds by the Jemal. d dealy joine! MANUN ned by his ance. nning 4 the ou ti ery hite pel inch al the to of quit ge. Th rig ha lina the m to long Wall Creeker (Ticho droma muraria). Fig 2. Dest 14.

Length 73/8 - 3/2 - Bill 13/4. Broad 17/2 - inches. Mouth broad, gape large. Tongue small flat horny, bluntly pointed & divided at the end. Bill rather defining where the nostrils are, which are slightly covered with small hairs besides the long ones. The feathers of the heed and throat; and upper back, are grey tips of the shafts of the wing coverts are the same. The inner webs of all the guills and both webs of the two outer, are light blackish, brown. Jail 10. The under side lighter color than ye upper, and has a shade of light blue. Tides of body like belly d went. Inside of wing quills light yellowish slate color, edges of inner webs dirty yellow ochreish. Inner wing coverts the same. The yellow round the use and ear is a cere. Back toe I harge 4. Front small 2. Large 3 joints. Two front joined to 1" joints. Eye-lids light grey. Indeed hazel. Over the use it has also a film underneath the eye-lids! which it can cover the use. it projects from forwards.

Inaun again See Vol 3. Pl. 57

See Vol 2. Pt b1.

Length. 4/2- 15/2 - Bill 5/8 - Broad 8/2 - inches. Under side of quills stateish faum color. inner ring coverts faum color. Tongue this shape thank homy at the point rest fleshy. Littled near Mohun Choki (in lower range of Hills). I saw some with the colors lighter. Middle and outer toe joined to 1" joint. Back lie 1 - inner font 2 - middle 3. outer 4 joints. Jail 12.

Drawn of the natural size. Called Chetroo by the Juhnwallees. this is the female. The male is much darker with white instead of yellow. Builds in beeta (holes in hill field walls) lays 5 eggs white with I rawn of the natural size.

11.46. he large Lig 1. Deer. 12. rather & the long o e in the shafti, webs or than mide of chreich ٤. to 1" jm 1 states n/k hm 忧 Fig 2. Deer 29th

4). joint.

Fig 1. Apparently The Brown-necked Shag. Vol 10. 19 425. Length 13/2 - 53/4 - Bill 2 - Broad 29 % inches . Colors correct, but in some lights some parts have a blueish greenish tinge. Webs of the tail feathers short near the roots __ This shape, and very stiff. Beginning at the shortest, toes have 1.2.3 & & joints respectively. Length of longest 2 1/8 inch including claw, to nearly the point of which the webs extend. It has an inner film under the eye lids, which it can project from forwards over the eye. It has no tongue, but a long round membrane in the place of one, which is joined to the bottom of the under mandible in its whole length. It has a membrane over the under part of its throat; the which is a hole, through which it breather. I will not with all the inspection I will make discover any mistries was a could not with all the inspection I will make discover any mistries was a could not with all the bird, difficult to approach; and makes a shrill screeching noise. ears very small. killed on the Junga at Hurdwar. When swimming, resulty a very little of its back is visible . often only its head . Itdives often and long . Called Jul kowa (water erow) also Panee Loua (same meaning.)

Train again Lee Vol. 3. Pl. 65.

Longth 15/4 - 2/2 - Bill 13/8 Broad 27 - inches . Inside of wing like The belly in, color, but the wing coverts are darker, the quill's lighter, almost white at the end. the inner ones are white at the lips. Under mandible very hollow. Tonque soft, thick & fleshy; rather sharp and horny at the end. The shoulder of the wing is white, which extends along the edge of the ring to the body, & to the setting on of quills: but it does not appear as drawn. Although the tail measures as above (from its not to point.) it appears in nature as drawn, not above of claw 3 1/8 inch. To show the cractly the annexes Tketch of the left foot, supposing the first fronting you is given. The back toe has only metmall web which hangs underneath. Although the wing when full stretched measures as above . the quills are very short, making a narrow wing when open; I the bird flies heavily close to the water , flapping its wings much , k making short flights . Drawn half the natural size by scale. See Vol 4. Pl. 43. only a kig.

1 joint

Pl. 47. Fig 1. Decr 12. nearh tongue ttom er part with all the of its ce toft bove MAINMANAMINIA Fig 2. Decr 23.

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1 jini

Fig 1. The Crow pheasant. or Chestnut Coucal of Latham.

Length. 10 1/4 - 10/2 - NB The tail is set on half way up what Appear the wright Bill 17/8 - Broad 26 3/4 where. All over Blackith blueish green. On the back of the head, the blue tings appears most prominent. On the lowerpart of back, it is almost black. The wrigs alone, and a few of the feathers at the upper part of the back between the wrigs, are the chestrust color.

This is about half the natural sije. by scale. Two front toes membraned together half way up first joint. outer 3. inner 2. Outer back 4 inner 1 - joints.

Jail 10 a little rounded.

Drawn again Jee Ool 4. M. 18.

1. 48. hear the on the by est of her abrana -joint Fig 1. Decr 14 th.

Longth . 9/4 - 4 - Bill 1 9/8 - Broad . 19/6 - inches . hilled inear Mohum their found in the Doon and various parts of the Hills . Called khat khor he the usual wood pecker names . by the Goorhus (proper) Lacha. The yellowish quills which are the enner are black with white shots on their inner webs . The rest of the quills are so on both webs , but in the meddle quills the whate shots have a tinge of dirty yellow. Under side of quills wholly light blackish statecolor with white shots on both webs . Vides of body like the belly. Inner wing coverts the same but the edge of the feathers Barker and broader. The white on the eroun a forehead is at the end of the feather like this . On the breast the middle of the feather is white like this . It black gradually diminishes , leaving only a fringe. Back lower part) rump, k upper tail coverts, fine dead black.

3 4 Joints. Inner back toe so small as to be useless.

The female is said to have a less exest , & to be black where this is red . in other respects the same but colors not so bright.

Trawn 3/4 the the natural size. M3. I have seen them a little larger. Tongue like that of Pl 38. Fig 2. But this can project 4 inches beyond the point of bile.

Drawn again Lee Vol 2. M. 27.

Lingth. 4 - 43/8 - Bill 1/2 - Bread 9 1/4 - inshes. Toes 1.2.3.4 foints Middle and outer toe joined to the first joint. Under parts wholly like the breast. Undervide of quills and tail like the upper but holden lighter. Tongue thin, very floot, pointed, k horny, & has the hooked joint. It takes very short flights, but hops from twoig to twig, every instant spreading & closing its tail. Jail 12. Called Takooleea in Jurhwall. Female a little lighter color. Inited in holes under the stone walls of the Hill fields. lays & cops. Drawn of the natural size. Seen in nearly fleshwood.

Pl. 49 Fig 1. Decr. 29. es, learn · mith ighter Fig 2. Dear 29

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Middle art. ngul

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4 294

Longth 26/8 - 8/2 inches. Bill 6/8 inch. Broad 5 . 6/4 - Longth of this joint yout. MB. The head is a little too large . I beak a little too long in proportion to the rest of the Bird. It is trawn me third the natural size. Standing as drawn, it would be about 2 / & inches high to the crown of head. The feathers where the neck joins on to the body are very long, & would from a ruff; but I did not ever observe the bird creet it. Vent & under tail coverts white. ather parts like the body in color, but the inside of rosing is bare of feathers, The skin glofy oven slightly horny & vermillion. Tongue 3/4 inch long flat, thin & fleshy nostils pervious. Tide of head under the eye bare of feathers, but has a few straggling hairs. The feathers of the neck are soft like down. It appeared to have and Fort of double tail the white one having 18 feathers rounded. The other 12 feathers much forked lying over it like this. for it appeared tomposed of too stiff for the Tail coverts . of which it had small ones above the upper tail . whose color is blackish greenish bronge. Called by the Putans Nukta. Formed in Bengal and Hindustan. I have seen many, apparently all alike but only this me; another was in company; as they are generally seen in pairs. Back toa 1. winer two hiddle three, outer four joints. Middle green to The inner halfway, to the outer wholly, up the I' foint. It very narrow thick web, or membrane up each side of the tast to the very claws. Lee Vol & M. 19.

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The Violet Hork of hatham . V.g. P. 54. maslight variation.

Length 25/4 - 21/2 - Bill (from the tip of the under tell) 3/8 - inches Broad 8.5/ Perfundicular height to the crown, when standing as drawn. 24 /2 with. middle be 3 /8 . Do Claw 1 /4 inches . Inside of the wings Dull light brown . Inner wing covered like the outer, but not quite so dark. Icapulars very large. same color as the wing . Tail the same but lighter, & the middle of the feathers whiteish. The feathers of the head and nech as somewhat hackled. at the lower part of the neck behind the feathers are fringed with very light brown. Jail 12. a little cunciform; and although measured as above. The feathers seemed to half lost from half to one wich of their lengthst by subbing on the rocks. Between the joints of the wings when spread . 3 th 1 3/3 mich . Found in Justwall. Called Ookab and Jumoor. (The Persian & Jungsknit names for, and as indiscriminately applied as our, Eagle) Inner toe 2. Middle 3. outer 4 joints. all slightly membraned together at the not about half way up the first joint. The under mandible has a grove at The ond into which the upper file. Tongue soft thick, fleshy at not. honey and hard at the end, and straped like the under mandible into which it fits and lies. Northils oblong covered with reflected briskles like the come they are not uncommon and some have been killed more than 10 ftm Vee Ool 4. M. 37.

63/8 - 31/8 = 115/8 1 Broad 11/2 10 . midd 47 -3 = 15 1/2 er uniqu linning min color as whiteigh rhasty 1/2.a med the engokut ther ath grove d t. hony t which the the on

Length 9 /4 - 7 % - Bill 1/4 - Broad 38 /4 - inches. The indes are a beautiful glass whiteness with a slight greenish tinge just perceptible. I have left it white being a able to hit the golor. Length of shin joint 23/4 inch. The eye-brow projects over the front part of the eye like that of Pl 34. Fig 1. The feathers on the breast are light-brown with shots of white on both webs. The shaft of all the feathers are dark. Of the inner uning coverts, the smaller are like the outer. The middle like the breast feather and the larger, are white with light blackish grey patches. Under side of quills as whiteish grey with a slight tinge of violet. The outer side as drawn, the inner we lighter than the outer, and has several blackish bars. Jail 12. cotor as drawn but it has the blackish bars on both webs of the b middle: on the vinner webs and partially on the outer of the two 2 mbs & 3 ms. only on the inner web of the two 1 feet strong in proportion claws slaash. It is a long-legged awkward losking & grawn half the natural size by scale. Toes 1, 1, 2, 3 joints. Middle and outer toes strongly menutrand tige by scale. Toes 1, 1, 2, 3 joints. Middle and outer toes strongly menutrand tige the scale.

M3. This is like but very coardely done.

Lee Vol 4. M. 45. only a fig

Pl. 52 tiful beer 15. Fig 1. rulle drawn rely a the to boku. 928 Longth 7 - 5th - Bill 5/8 - Broad 25/4 - inches. Colors worrect, but in nature it has a delicacy about both color & shape. The smaller quills are drawn (appearing between the coverts and the larger quills) The middle quills are barred in the same way, but the black bars much brader. The outer quills, are blackish blue, with bars of the light blue, i con inner web. on outer web, wholly blackish blue. Inner wing coverts like the belly. Under side of quills whiteish grey, with blackish bars, broader than on upper side. Under side of tail the same. Upper side as drawn. 12 feathers rounded. Claws polished black, very shapp. Back be 1. inner front 2. Middle 3. outer 4 joints. The under side of the toes, has a curious projection at the end of each joint like this the side of the toes, has a curious projection at the end of each joint like this the 3th 4 th joints. Tail lipped with white. I saw a pair apparently alike, but only shot one. See Dol 4. Pl 44. only a fig.

tig 2. Tailled near theree.

Lingth b/2 - 6 /3 - Bill 3/4 - Broad 26 /4 - inches. Thigh joint which is long in Importion 2 /8 inches. The upper joint is also long, and projects much from the body. I like this. The tail is set on high up. The Livels are brownish state color on the outer wire. The winer is much lighter color, barned with the brownish state color. The inside of the wing is almost white. barned with blownish state color. Immer riving counts like the breast, but the bars are more brown. Tides of the body under the wing are light-middle and inner, of the 3 is joint of the outer there is a projecting knot, at the under side I like this.

Lee Ool 4. Ml. 40 only a fig.

5/8-3-= 8/8 ratur phen k lan blu thu er ki is, he Zig 7. Jany 5. 1828 林 Jig 2 . Jany 19th

Lilled near Hurdwar.

Longth b/2 - b³/8. Bill 3/4 - Broad 28/2 - inches. Brown half-size. Back light blueish slate color. Middle wing coverts (tally ents seen) like quills, but edged & patched with theitrent. Lower part of belly, vent & under tail coverts light pinkish four color. The inner edge of quills is edged and senated into the brown with white mer wing coverts white patched with brownish black the breast. The patches sollower are at the onds of the feathers. & the shafts are also black, but not seen from the over lapping of the feathers. Joes 1.2.3.4 joints. The two last joints of each have well shaped and flies swiftly. Middle and outer too membraned together half way up the first joint.

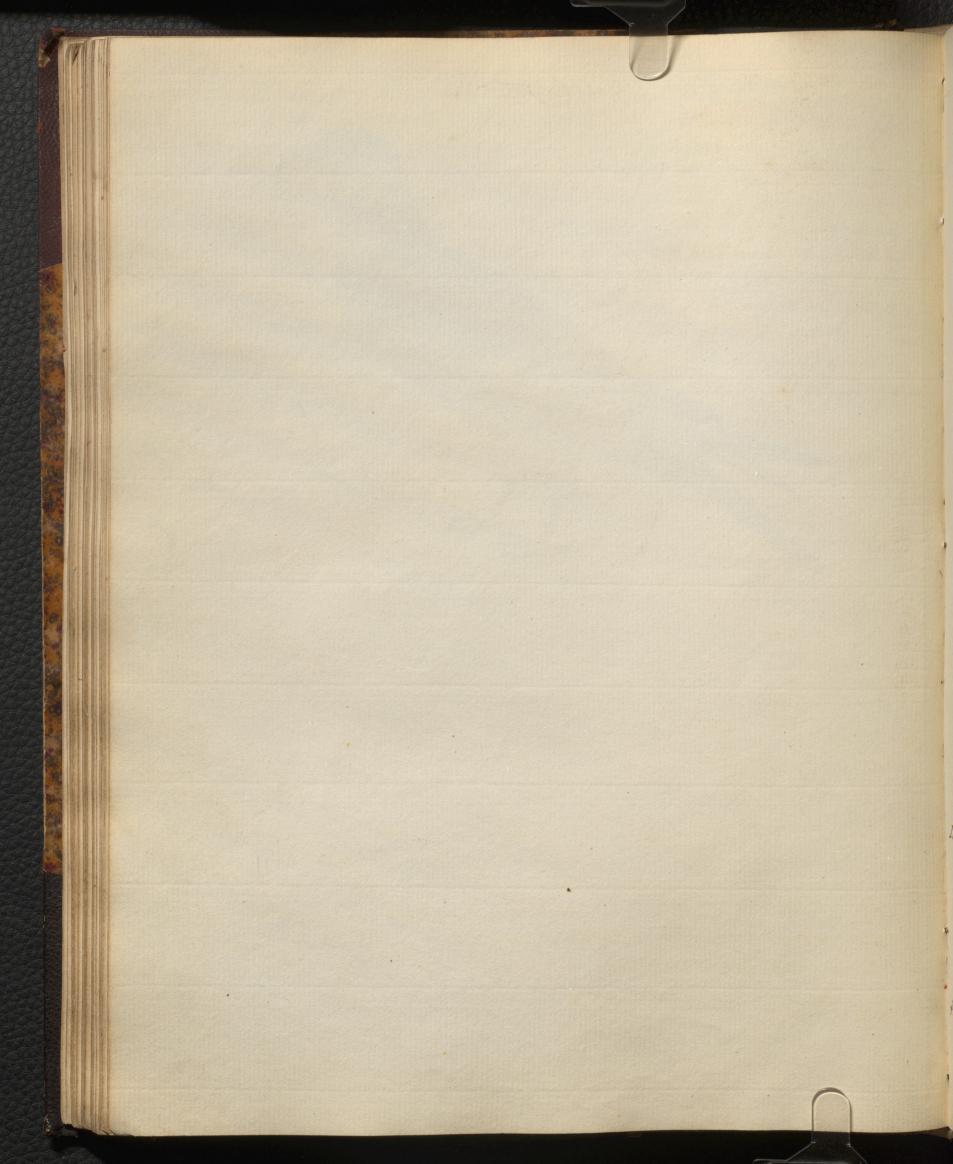
Fracon again See Ool 4. M. 32.

Pl. 54. Hu chei er. ALL The rae eh /way Fig 1. Jany 25 . 1828 .

kited in the love.

Lingth 12/8-113/8 - Bill 13/8 - Broad 58 1/4 - inches. The feathers of the head are brown fringed with dirty whiteish ash, some of them have a tinge of refores. Those of throat breast k belly are dirty whiteish ash in the middle brown at the edges. The feathers all over have black dark indes olive greenish brown. Luills dark brown almost black the outer ones, but the edges of the inner webs are patched with light blueish brown. (as seen in the immerment quile) I ail 12. Light brown. inner webs patched like the quills. Duter webs have ahades of dark brown here and there. Joes 1.1.3.3 joints. Middle and outer membraned to the 1th joint. Back claw brogest and strongest. The whole of the feathers except the quills and tail, are pure white and downy at the root half. The body is also clothed with with white down under the feathers. Immer any coverts darker than where, k tipped & edges into the list is a fine eagle looking hawk. and kills haves. Out riding I have seen it however, galloped up k got a have for my dinner which it had killed. This has happened twice to me, once in the Doon, once near meent.

Lee Ool 4. M. 39



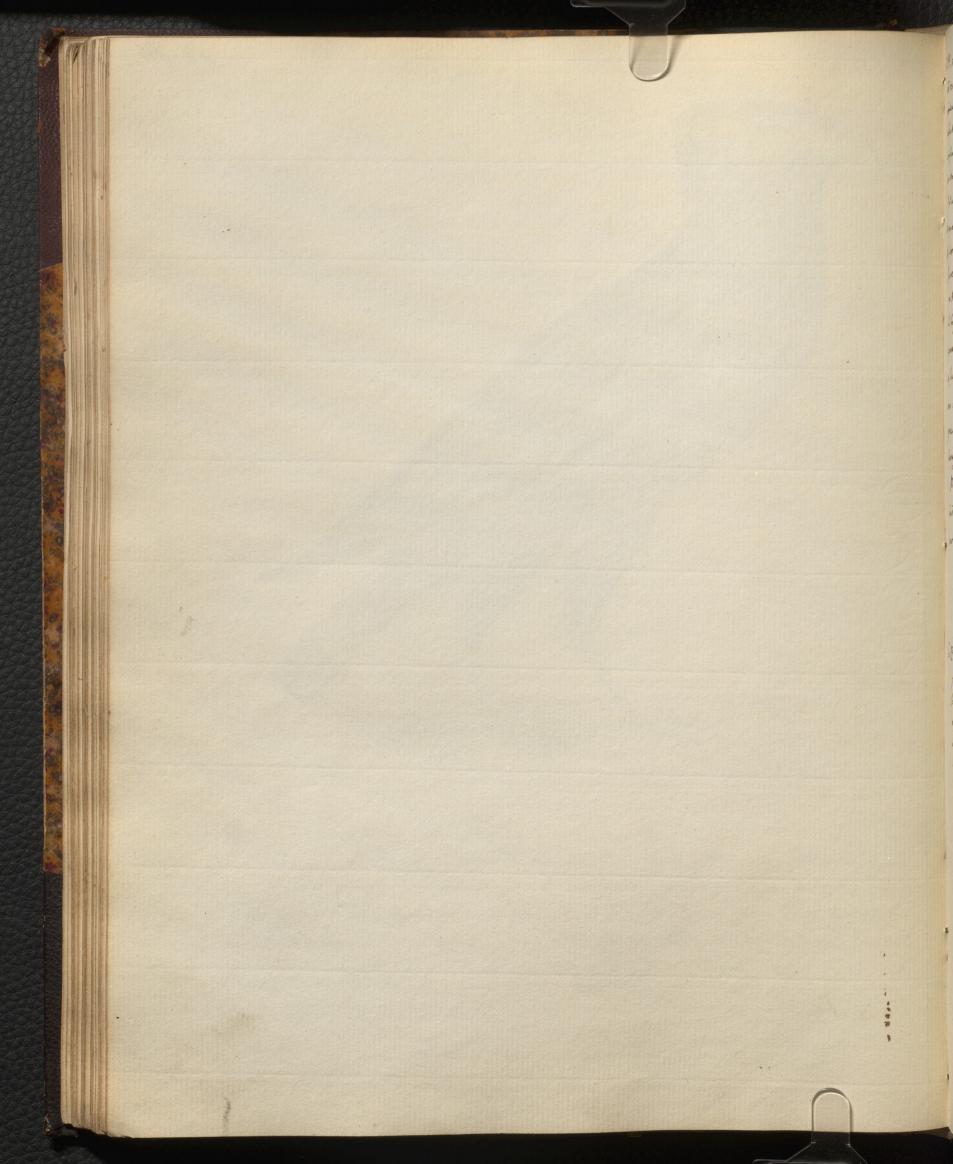


12 April 1828.

Length 17/8 - 11/2 - Bill 2 - Broad 66 - inches. The black feathers of the head are pure white on the root half. Quills are barred in two or three places, with mottles brown k white on the outside, dirty white on the inside. some of the inner quills are tipped with dirty white. Tail 12 where it is dirty white undernicath, it is light brown above. Sides of the body, and inner wing coverts like the thighs.

Joes 1. 2. 3. 3. joints. Perfued height 18/2 inches. Killed in the Doon

Jee Vol 4. Pl. 38.



Additional observations, to Different birds.

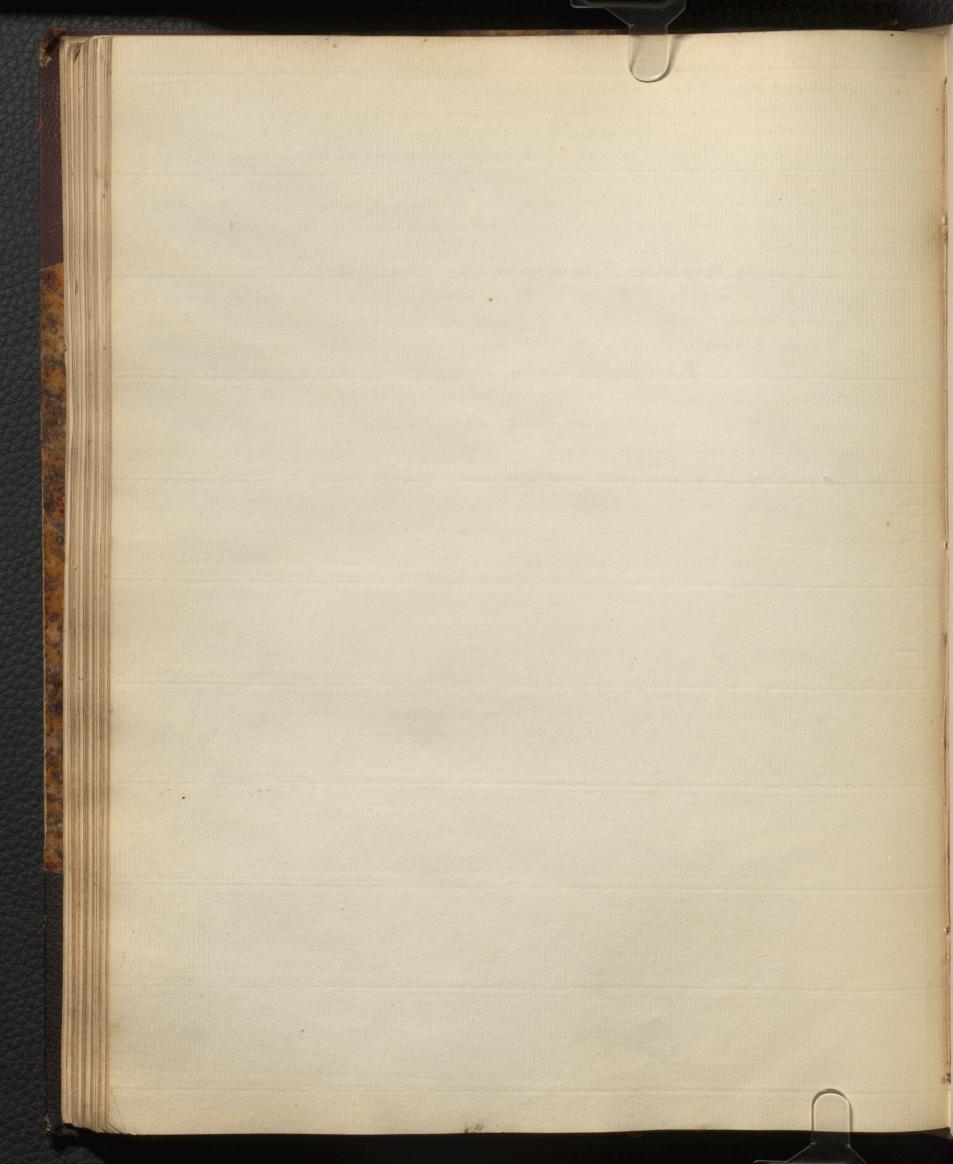
To Pl. 11. June 8. 1828. A boy brought me one alive, which he had caught by setting a roose over its next; in an oak tree. It was probably the Jemale. I put it in a cage; it refused to cat inserts, bead, but on the next money I gave it a small brid as large as a green finish which it cat, & Nanh water as door as I feet some in the cage. & secured quite quick in its confinement. In the afternoon I gave it another brid as large as the former, which it deight as soon as I held it within its reach, & began cating before me.

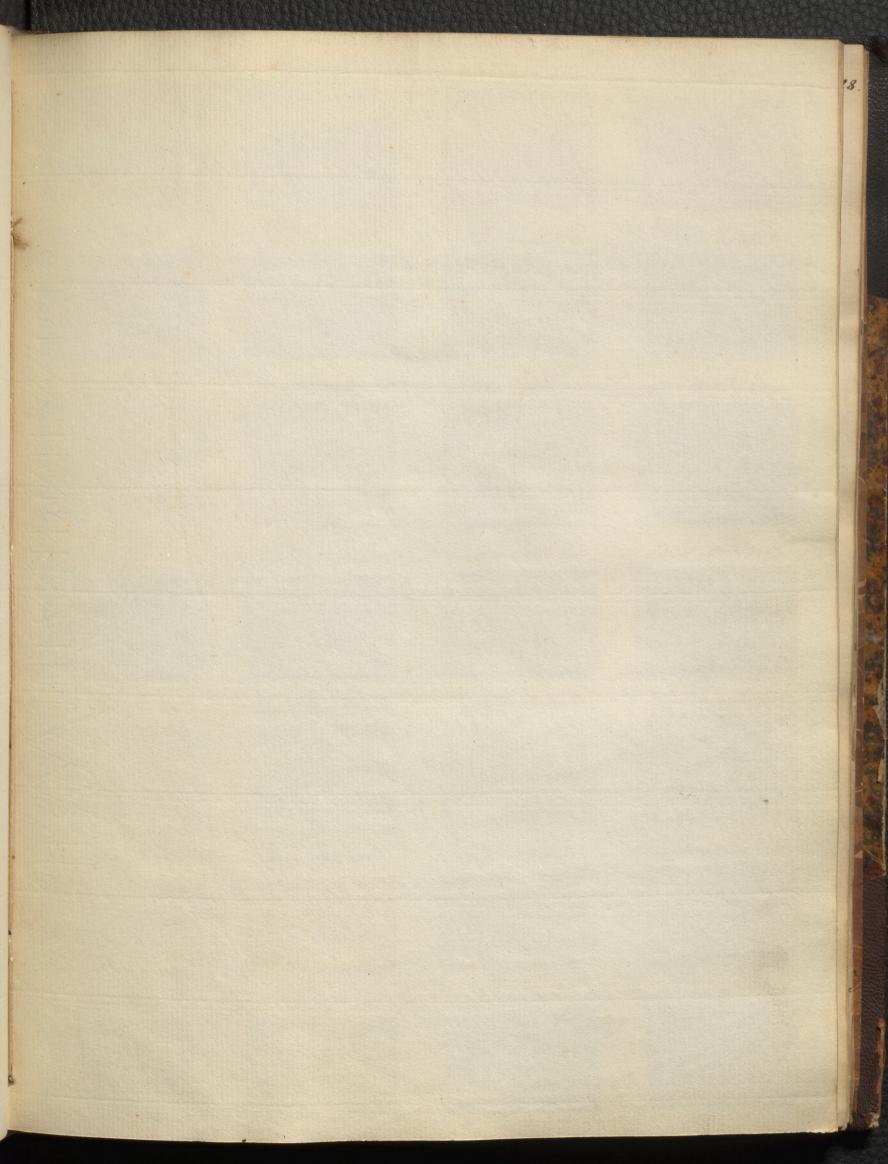
Yet its chief food can hardly be small birds for it flies too stowly & chemsily to catch them. I young mes it can only procure at me deason. and it hops about as the ground apparent

by boking for misects.

June 10 th. The same boy brought me the mate of the above, which he caught with a noade on the same nest. I put it into the cage with the other, a offered it a small bird which it begas eating immediately. I but the boy for the nest which he brought with one young just hatched a a broken egg. The nest was of thicks as thick as a quill, with a few wirry roots above, to lootely put together k so shallow, that I wonder the eggs are not shaken out, should k high would more the branch a little. The egg was light greenish blue, with brownish green energular shots k patches on it. The young being above I put it into the cage; but the old ones inimediately helled and eat it. Both were exactly alike, k I have seen numbers all the same. They go drown into the Roon k warm valleys in writer, k spend summer k bread on riges old mough for snow to fall on in lovinter. Eye has a millital membrane from upwards.

To M. 8. Fig 1. June 11th Shot one in which the vent was white, with a very light buff linge. Tail has the two outer partners with mangular white shots on each edge of to the webs, k shots on the skaph. (like that in Vol 3. M. 9. Int the shots smaller.) next 3 on each kide, had the shots on the shaph, k only on winer webs. two middle mes only on the shaft. Tips of all but the two middle white. Pail rather olive brownish black, than black. Bill only 1/4 inch. The quill have triangular white spots at edge of winer web; a little tufous at the inner comer. Nostile surrounded by a very prominent rim.









The preceeding are for the convenience of ascertaining the colors of eggs, or other things from the Natives of India; by shewing them the plate and letting them point out the color, otherwise very little can be made out from their description as the common people have very fine ideas on the subject.

Usually they rank every thing under five colors. By

- & Kala. hiterally black, but may be translated dark; under this head are ranked black and its shades, bottle or other dark greens, dark blices, purples, browns,
- b Lall. red. under this are muked, red and its shakes, orange, reddish browns, reddish purple (if not very dark, in which case it would be called Kala)
- · Pingla, Peela, zurd, Yellow. nieludes Yellow kitt shade; light orange; yellowish browns;
- d Hurrea. Green includes light blue; light green; light blueisk purple, yellowish green;
- e Suffed literally white but may be translated light includes white; ash or cinereous; very light orange, yellow, pink or browns;

The letters refer to those at the colors, and show under which head, ordinarily the natives would rank the latter. Some would have two names. Thus light - blueish purple would by some be called Lala, by others Hurrea. I do on with some others.

Index to Vol 1.

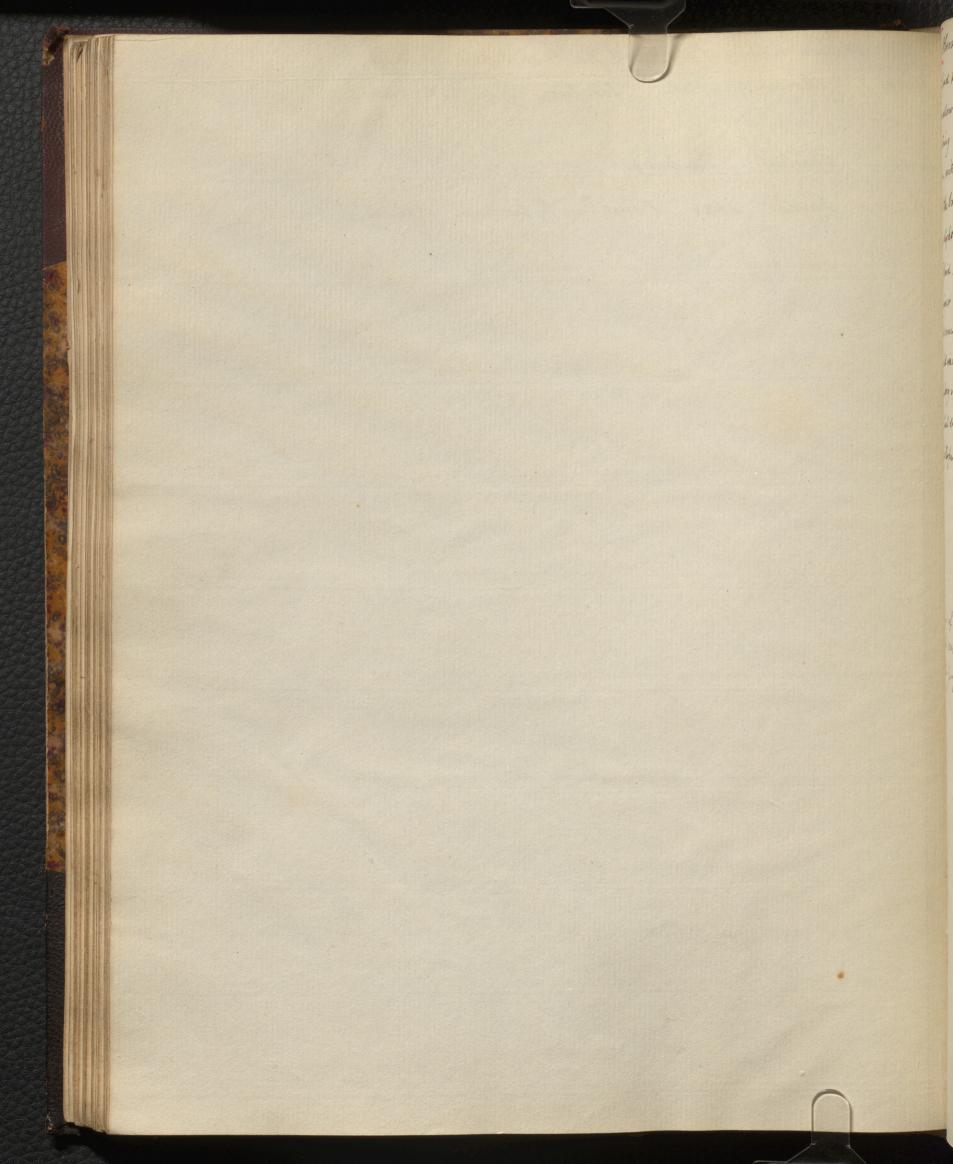
Native Names of different parts of Birds.

Native names of different parts of birds.

Beak. Chorich. Nok. Toontur. Jones by the Jikhs.

Crest. Choopul. Kulunger

Spur . Lanta . Thar . Punchura by Soorkus . Agrearo in Naghoor .



Observations in addition to those at Page 20.

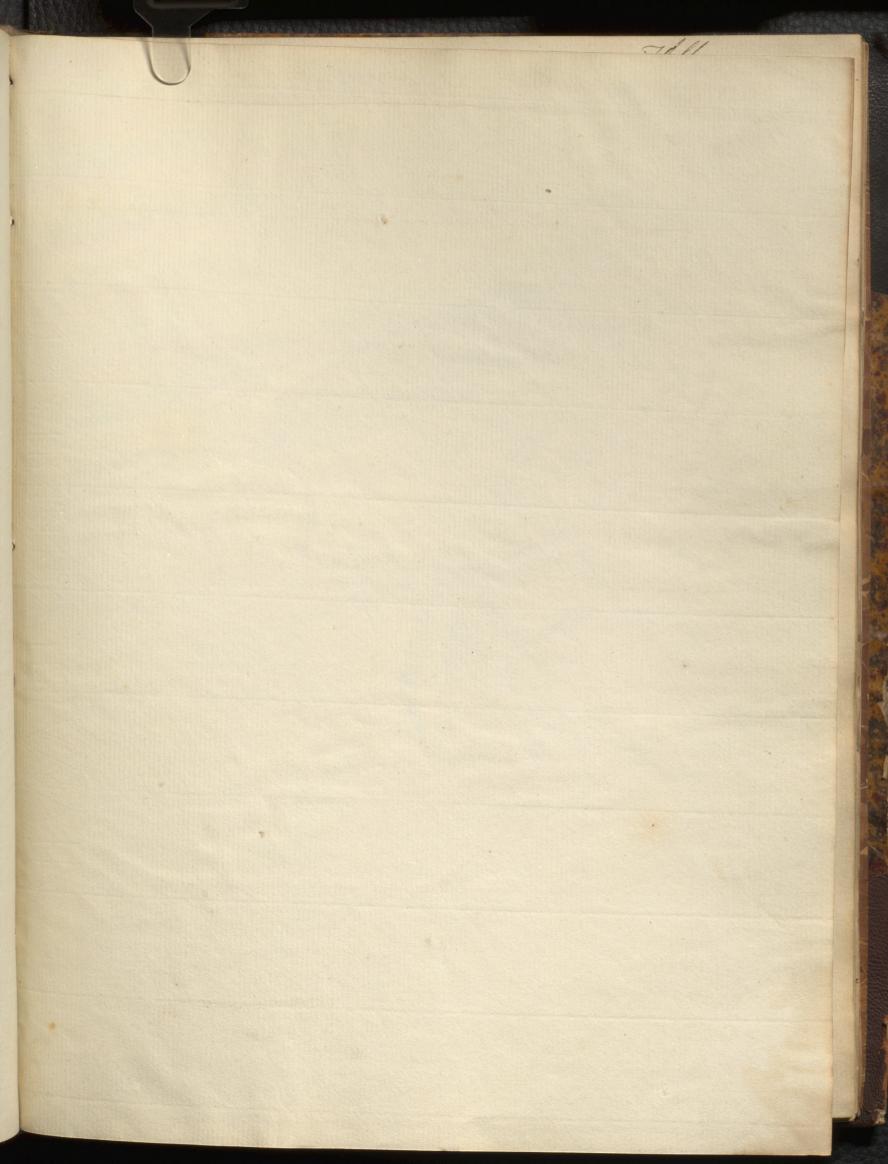
MB. I find that if the bird be placed in this position of holding it by the bill. and allowing the body to hang down; the measure - ment is the same, if the string be taken from the bill over the erown of the head, straight down, without fressing it into the curvature of the neck. This saves trouble. orif the bird be drawn out straight like this this fulling the neck very slightly, the measurement is the same.

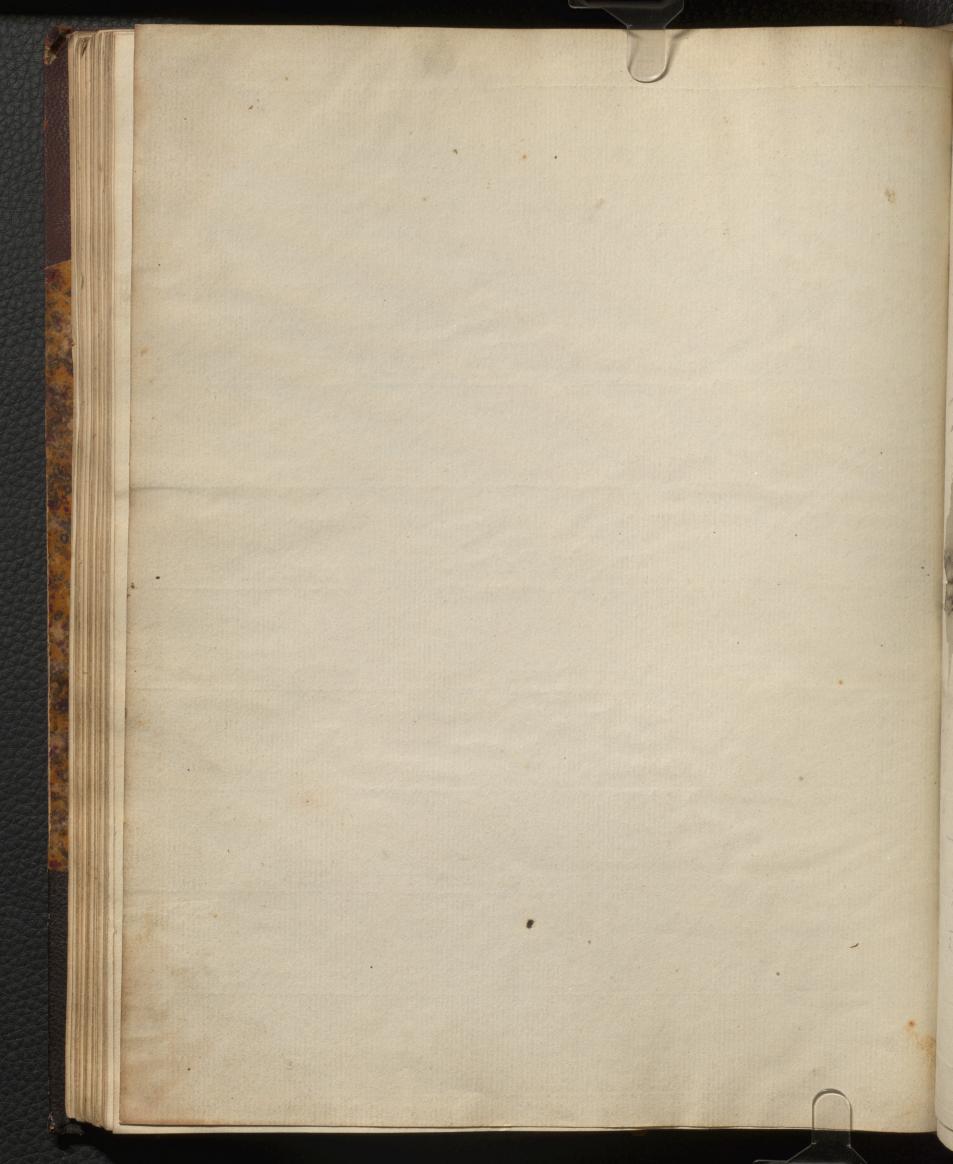
To find the setting on of the tail, it is cocked up like this in and the inner corner of the angle it makes with the body, is the point of measurement. This sometimes gives a greater difference than the appearance of the bird would indicate; as some have the feathers of the rump, vent, and tail coverts, very long in proportion to their sije; which makes the body appear longer, and the tail shorter than it is . e.g. Mess. Fig 2. Pl 48 kothers.

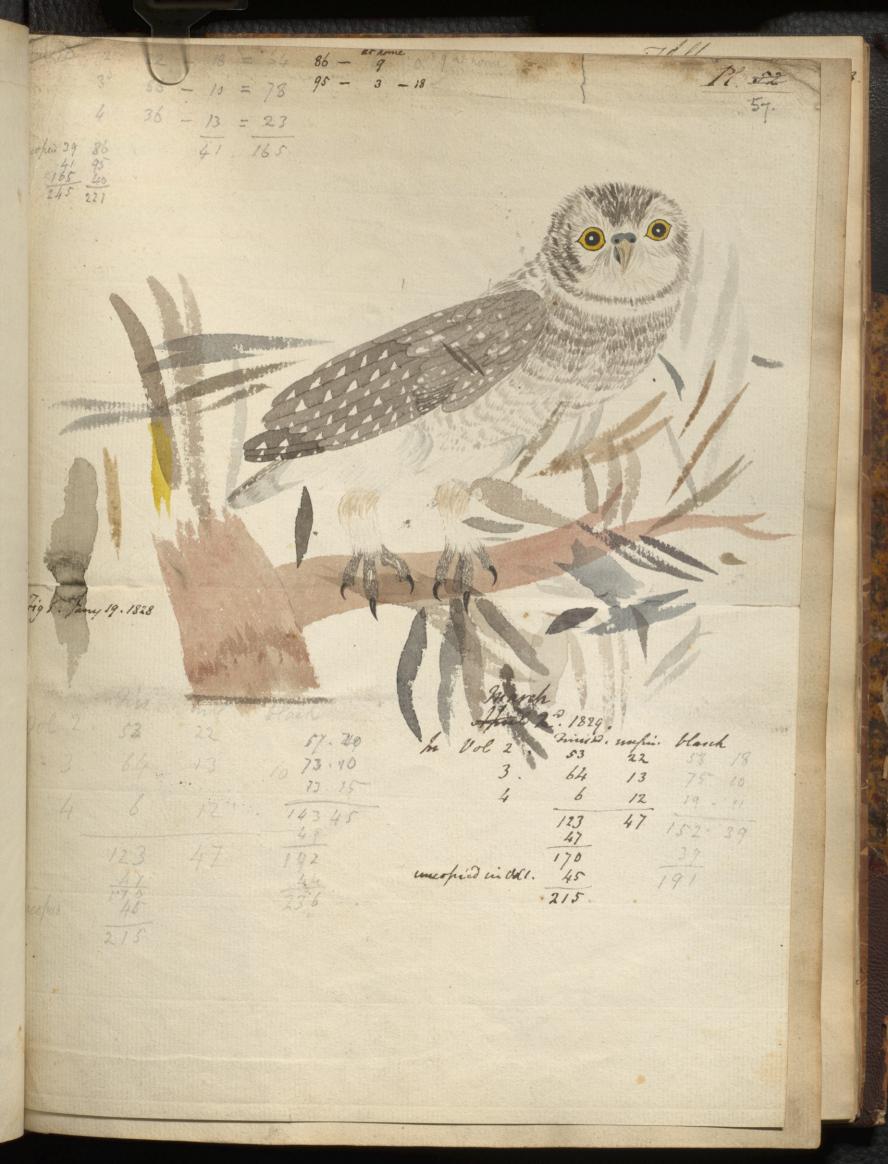
The Perpendicular height means when the bird is standing as he is drawn.

It is strange that not a single native has any idea of the migration of birds; they know that at certain seasons certain birds disappear, and reappear at others; but they suppose that they hide themselves in the jungles.

min of y memorandum of Ool 2 2. Bolt 1. miscellaneous MI to b to be left for Pheasants. 7 - 14 Partidge . King fishers . 17 Water fowl . 1 Wood pockers 31 33 Inicellarions at hos Swallows. 36 34 Pigeon. 37 45 Grackles. 49 46 Miscellaneous. 48 37 owls. 56 52 Crows. 57 62 Wagtail 63 64 Hombill 65 66 grows. 67 68





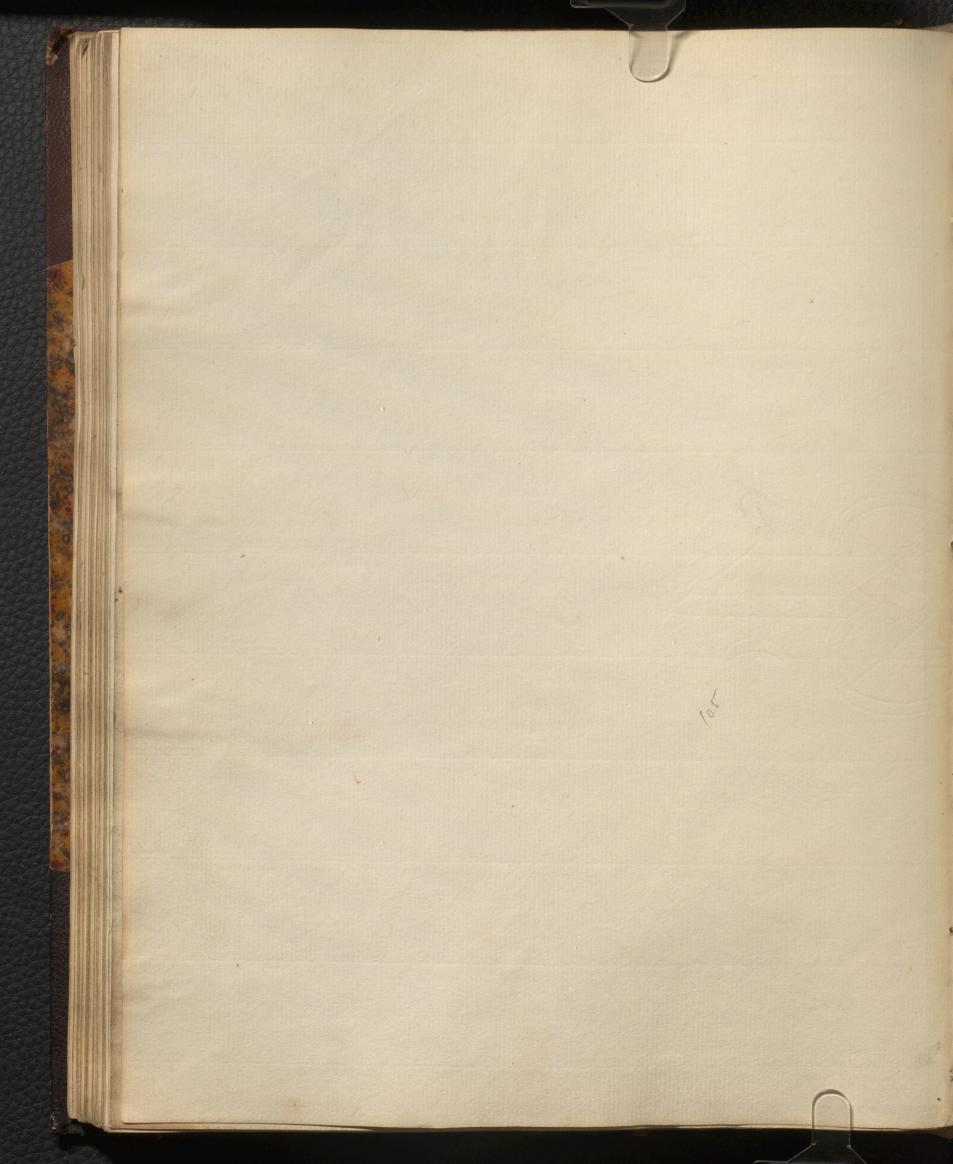


Killed in the Doon . Length 2/8- 1/8 - Bill /2 - Broad bif4 - Inches . Inside of wing light statecolor. outer side; huills yellow on outer web, black on the inner. Tail 12. colored like the quills, but black on inner web not so dark. Inner wing coverts whiteisk yellow. Ofter tail coverts like the back. They eyelids are a tribliant silky white, which I would not imitate. Toes 1 - 2 - 3 4 Joints. middle joines to the winer half way to the outer whole way up the 1st joint. Drawn the natural size. + + Tonque lat . thin , homy , a fringed at the end . That one at Barrion ka Shola . not with a membrane ,

itecolor like he ellow.

whi

half



Hore . Jany . 1- 1828 . Appendix Latham's Birds. [Wol. II. Jany 1" 1827.]

Of the figures of Length . The first means from the point of the beak to the setting on the tail: placing the bird in its natural sitting position, & measuring by the curvature of the head (pressing down the erest if the tird has one) neck, back de : The second from the last point, to the end of the longest tail feather.

The Length of Bill or for short "Bill". signifies from the point, to the

comer of the mouth when open. The breadth means from the extreme points of the longest quill from wing to wing , when full stretched : whether the outer quill or not . The above are invariable, unless other measurements are expressly specified. The Native names given, allude to the place where the bird was killed, unless otherwise specified. For the names of the same bird differ witen in different parts of India; as indeed is the case with plants, insects, and wer animals. In the Hills (of the Himaleyah) villages a few miles apart have sometimes different names for the same bird. The information about their nests, eggs, time of breeding, migration and other local points, is collected chiefly from the village boys, who (in the Hills particularly) from being continually bird nesting, and playing about in the jungles, are well acquainted with these matters. MB. The men comparatively know little: they often vay " When I

was a boy I could have told you all about it, but I have forgotten it now." The native names are given with exactness; shelling according to Silehnists plan. This generally is not sufficiently attended to, which creates confusion. many native harnes of birds, have some meaning, characteristic of their color, song, shape, manners &c -

The under parts, and those which cannot appear in the drawing are minutely described. Where I have not exactly hit the color, it is mentioned. From want of this having been done in the drawings from which Latham's descriptions are taken, he has described the color of some incorrectly.

Almost every picture is taken from a real specimen, immediately after it has been shot : chiefly shot by my self, which gives me an opportunity

of observing their natural position and motions. Some few are taken from live birds in cages. but where this is The case it is mentioned. also if it is taken from another picture, or a stuffed specimen. in some the tongue is mentioned to have the "hooked joint". That is when the tongue has a joint near the not with a sort of barb above pointing packwards like this When a bird is stated to be drawn 1/2 - 3/4 he the natural size; it is done by reale, with proportional compasses. The toes are sometimes said to have 1, 2, 3 4 foints, or 1, 2, 3, 2 de le. The first number related to the back toe, the second to the inner, the third to the middle, the fourth to the outer toe. MB. I find that if the bird be placed in this position holding it by the bill and allowing the body to have down, the measure - ment is the same, if the string be taken from the bill over the crown of the head , thaight down without pressing it into the curvature of the neck. This saves trouble. Ms. To find the setting on of the tail, it is cocked up like this and the inner corner of the angle it makes with the body, is the point of measurement. This sometimes gives a greater difference than the appearance of the bird would indicate: as some have the feathers of the sump, vent, and tail-coverts very long in proportion to their size; which makes the body appear longer, and the tail shorter than it is . e . 9 D. Vol 1. Pl. 53 . Fig 2. als Pl. 48 and others . Ms. I find that if the bird be orawn out straight like this the pulling the neck very slightly, the measurement is the vaine as either of those mentioned above In some the eye is said to have a "film from forewards" for backwards, upwards, downwards) that is when it has a film under the eyelid, with which it can cover the eye; and which projects from the front or back, or where, or lower vide of theeye. (Some of the birds being only wounded anables one to ascertain this) For brevity's sake, when the toes are directly joined to each other, they will be said to be joined"; if joined by a membrane, to be "membraned". The perpendicular height, means when the bird is standing as he is srawn. of M3. Thould the bird have two toes before a two helined. The numbers will refer respectively to the inner back, inner front, outer front, outer back toes.

19 1

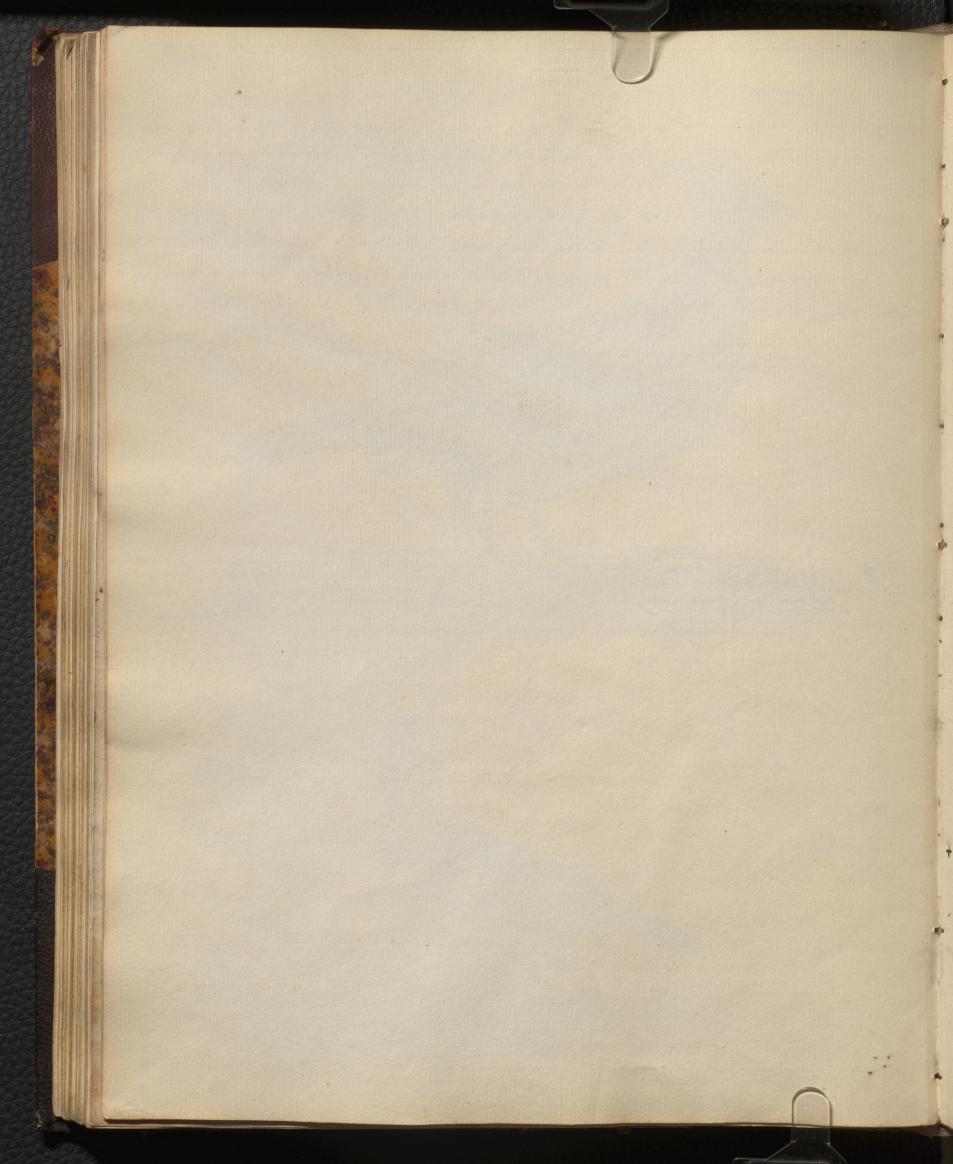
Longth 15 /4 - [prefing down the top-knot] # 8 - Bill 1/4 - Broad 29 /2 - inches. Jour 'h inches the thinat and breast feathers are long backles. The shaft white. blackwebs near the roots, gradually lightening to ash color at the tip. bides of body under the wings like the belly; i.e. blackish with the eatreme tips of each feather brownish ash-color. Jail 12. and perhaps 14. For two middle feathers do not appear clearly whether they belong to the tail, or coverts, like those of the Jungle Fowl. See Vol 1. M. Jig . Tongue flat, thin, lancet shafed.

Fig 2. is the funale: a little smaller. all brown, with light edging to the feathers.

The position of these is correct. They are not handsome shaped hirds at all. having long bodies, and the ligs far behind, duck fashion.

Head, neck, breast & belly, dark brown, with light brownish grey shafts & ends. Back the same, but darker & only ye very ends of the feathers light brown, a slightly speckled with very minute black shots. The two middle tail feathers the same; rest sark brownish black. It feathers. Ajust perceptible knob in the place of a spur.

Common Kalij Pheasant (Gennous leucomelanus). Ace also pl.3. Fig 2. Tely xg 4 1828.





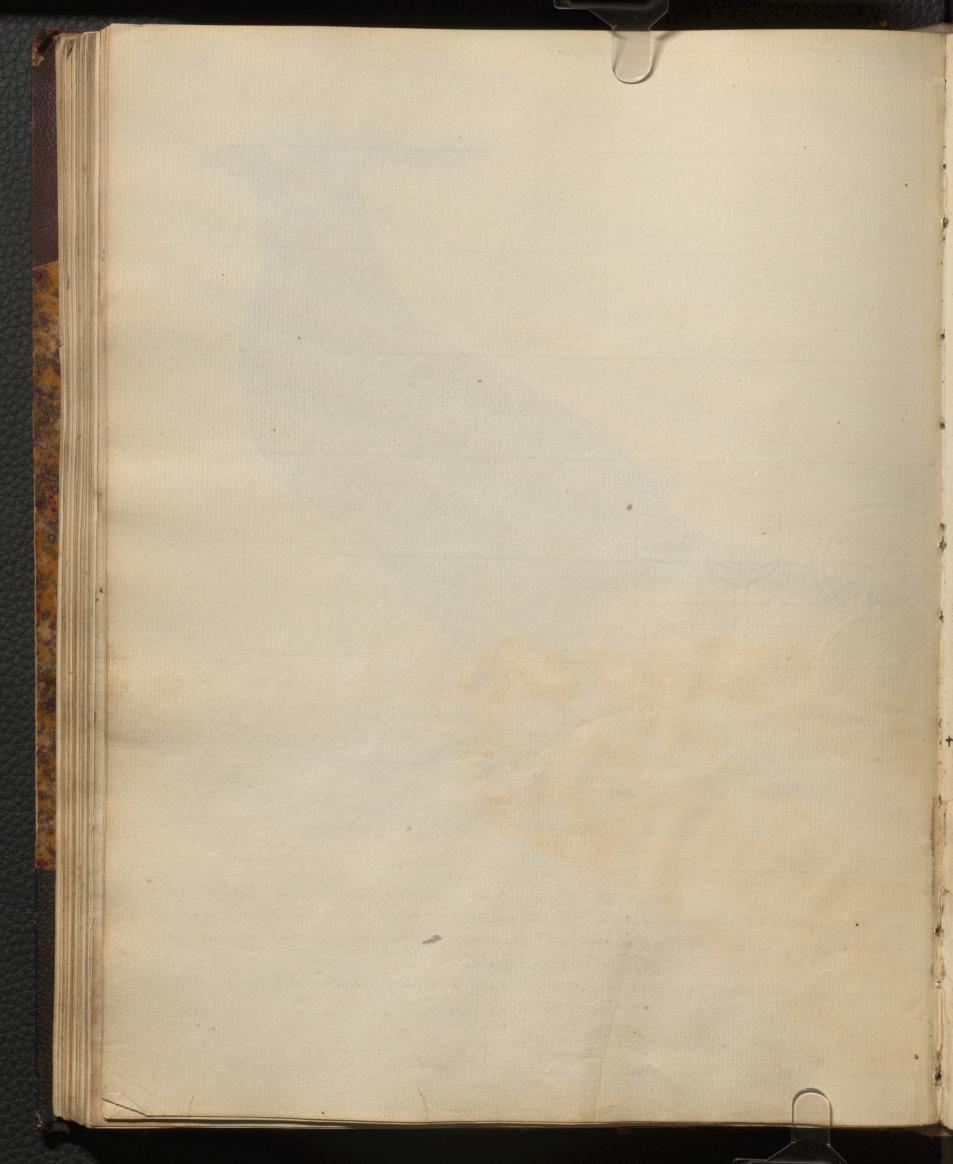
Sune 5th Malf-sige. Very correct.

Lilled at Pokree in Naghoor.

Length 14 - 9 1/4 - Bill 1 1/10 - Broad 30 - Perhend 1. 14 - inches. Inner wing coverts light blackish brown, with white shafts k edges. Quilles all alike. Jail 16 . Jail coverts 8.

Joes 1, 2, 3, 4 joints. Middle membraned to einner, as far as 1th; to outer as far as 2 in joint. Spur 1/2 an inch. Hight but very sharp.

Jound all over Jurhwall, on ridges from 5500 to 8000 ft high. Called Koklas or Fuklas.

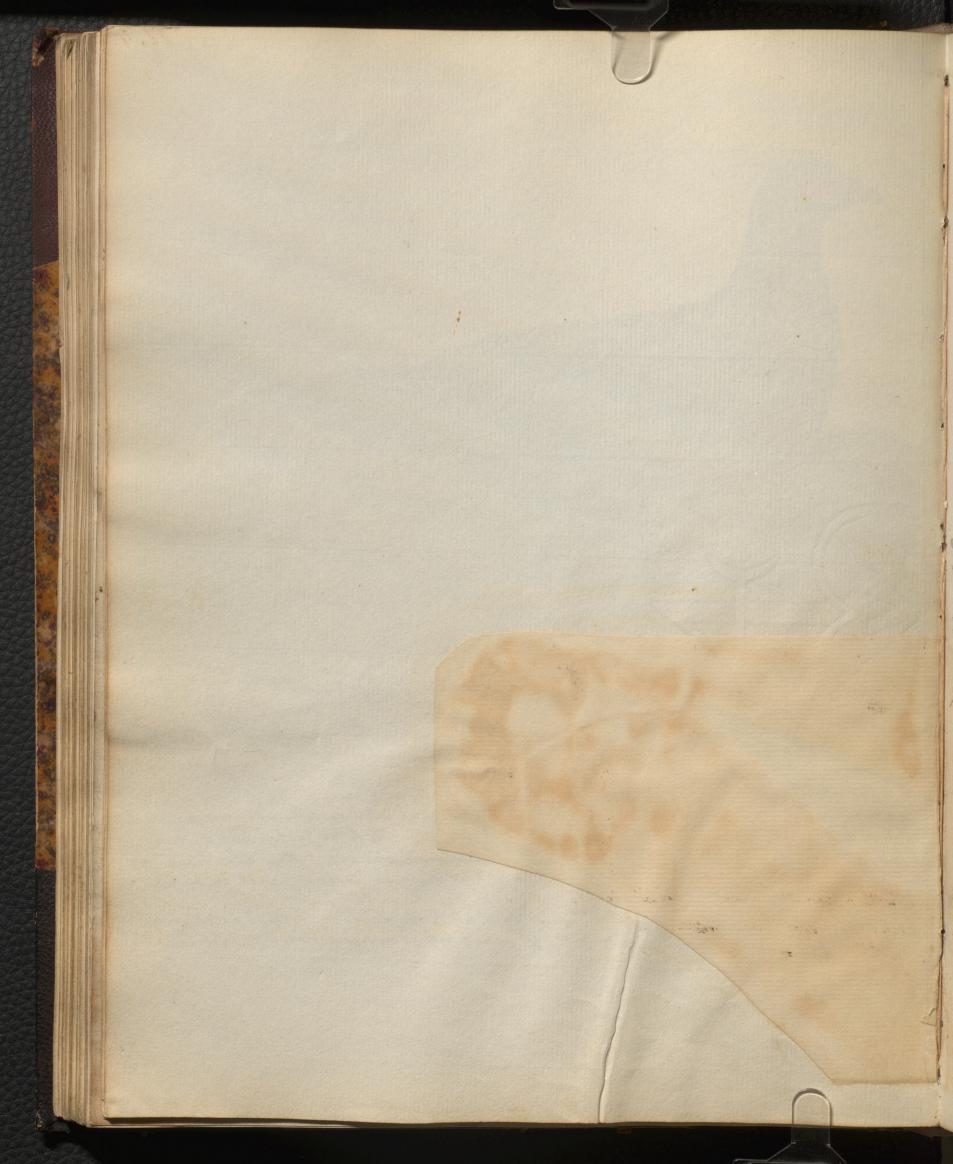




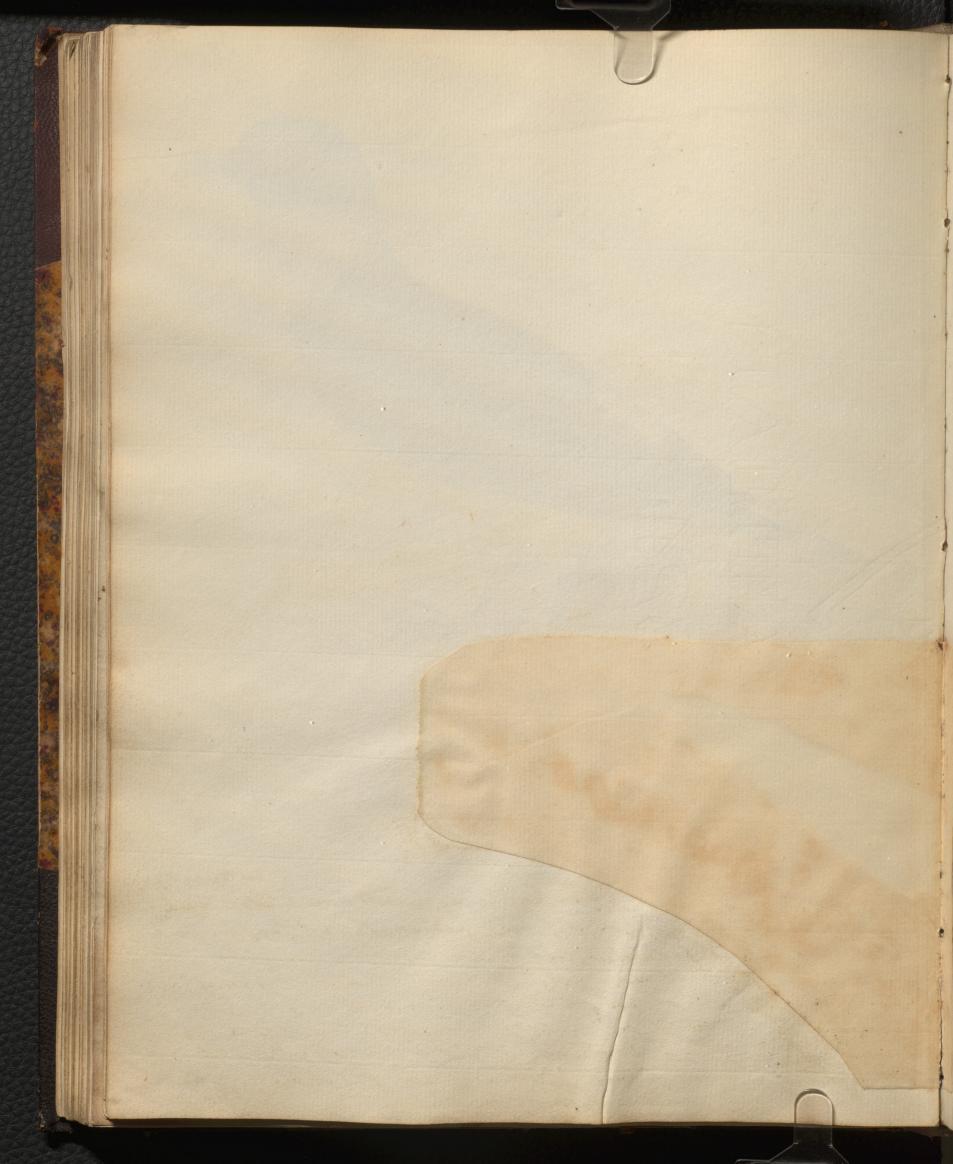
a copy of Fig 1. Pl. 1, that being Common Kalij Pheasant (Genneus leucomelanus). Paioree Augh 16. 1828 not will done.

a difficult bird to Fraw. But on the 3° trial, this is pretty well done. The general color is a mixture of black, green, blue & brown. Not only in different birds do different colors prodomniste but in different lights, the same bird will appear different. The lower part of back & rump has the feathers sark ask at the root (as videes the feathers all over are) then blue black, like the rest of the body, but the contrast of the white makes it appear darker; with 1/4 wich of the end of each white.

This appears to be found all over the Haills from Nipal, up to the Julling. both in hot k cold places. When a flock is disturbed, they start off, making a curious noise compounded of cackling, histing, & chirping.



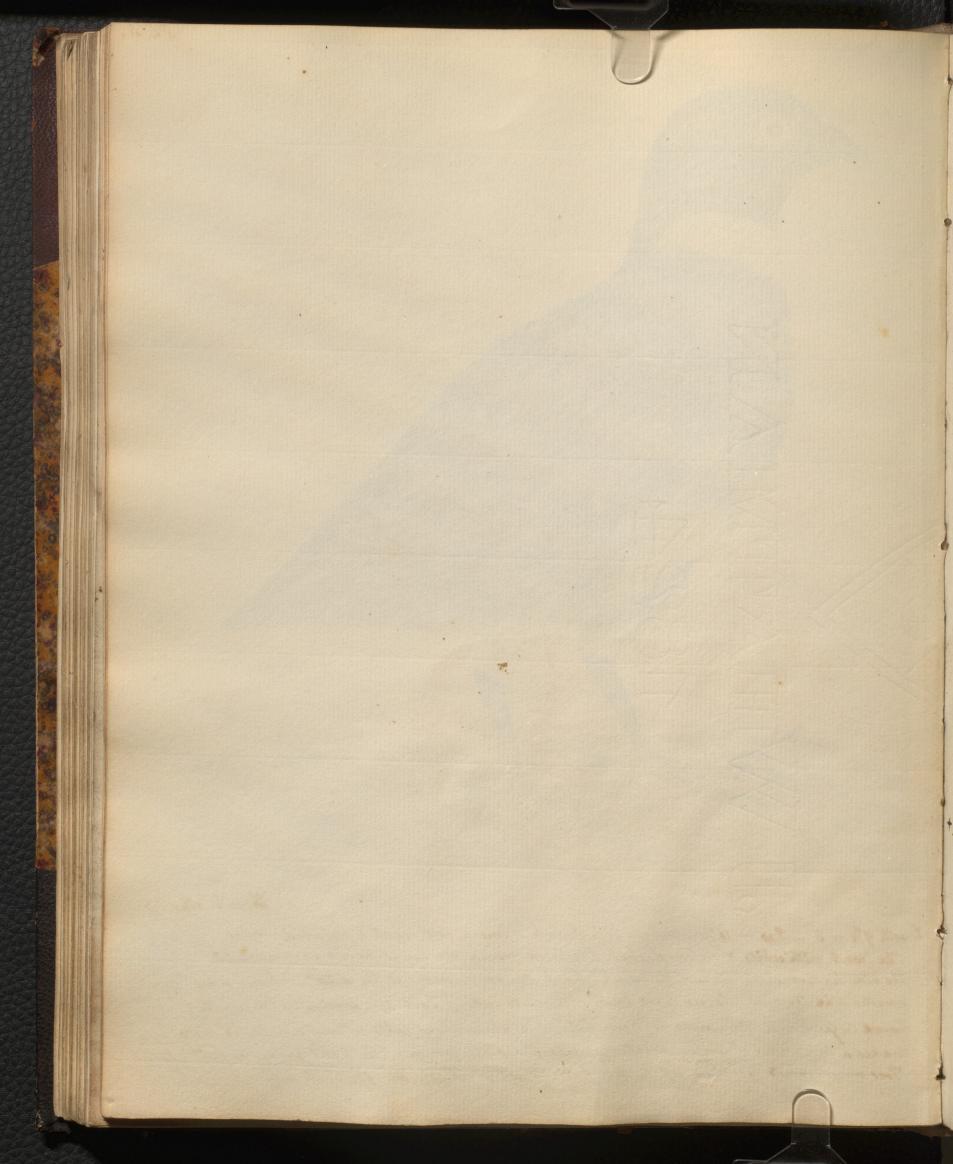






three fourther size.

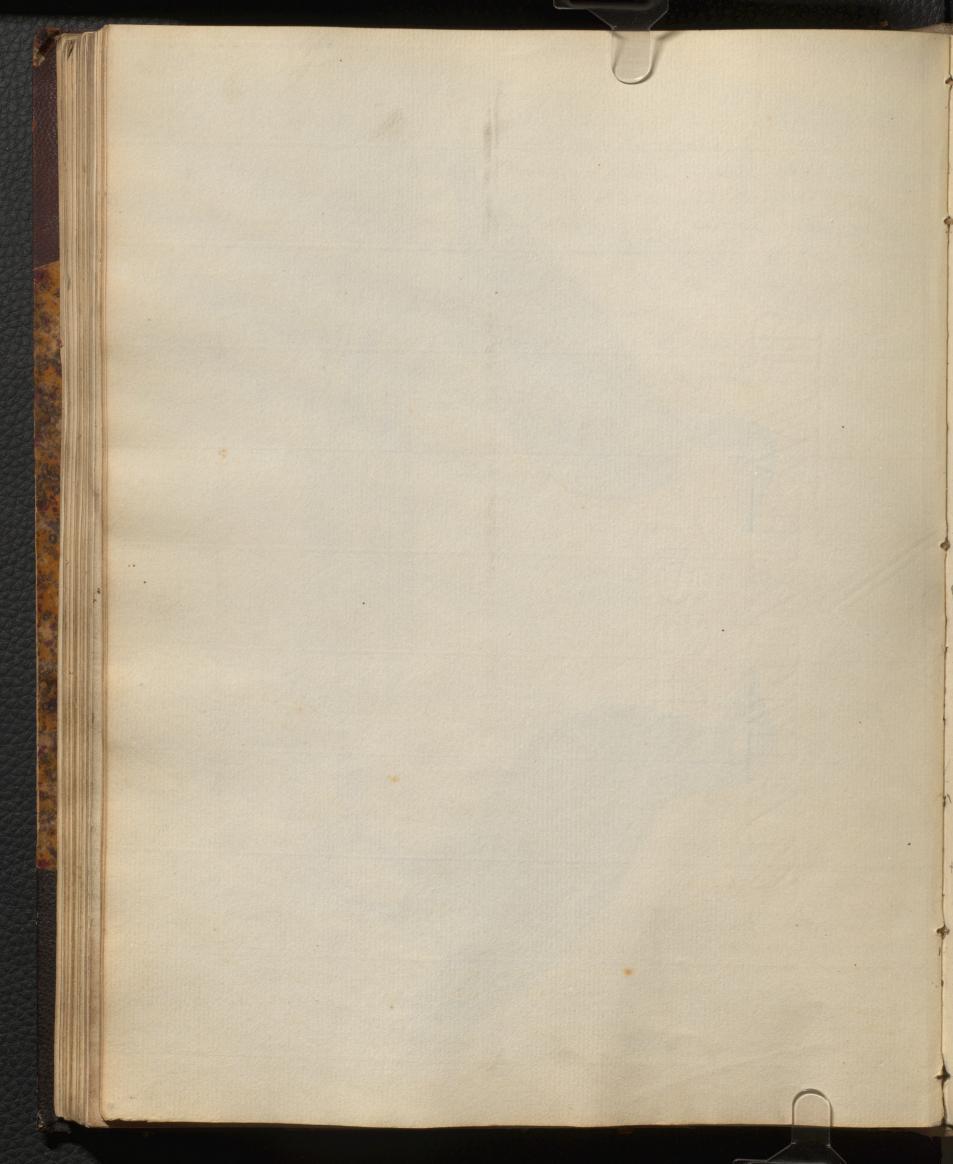
ngth 9/4 - 3 - 9/10 - 18/2 - inches high 9 inch - Tonque soft, short & rounded . Sides like treast, with white a rufous dashes . The pink round the eye is base & carunewlated . The vide feather shows those of the rump . back the same without the aftest . Inner wing corests smaller like the back , larger light from with white ends . Tail 14 . winden by the coverts . Found in Gurhwall from 5000 to 9000 feet , i.e where snow falls in writer . Called Picora . makes a large nest of grafs . Greater quills chocolate brown with light rufous or buff edges . Toes mumbraned together up to the first joint . Middle toe 1/2 inch long .



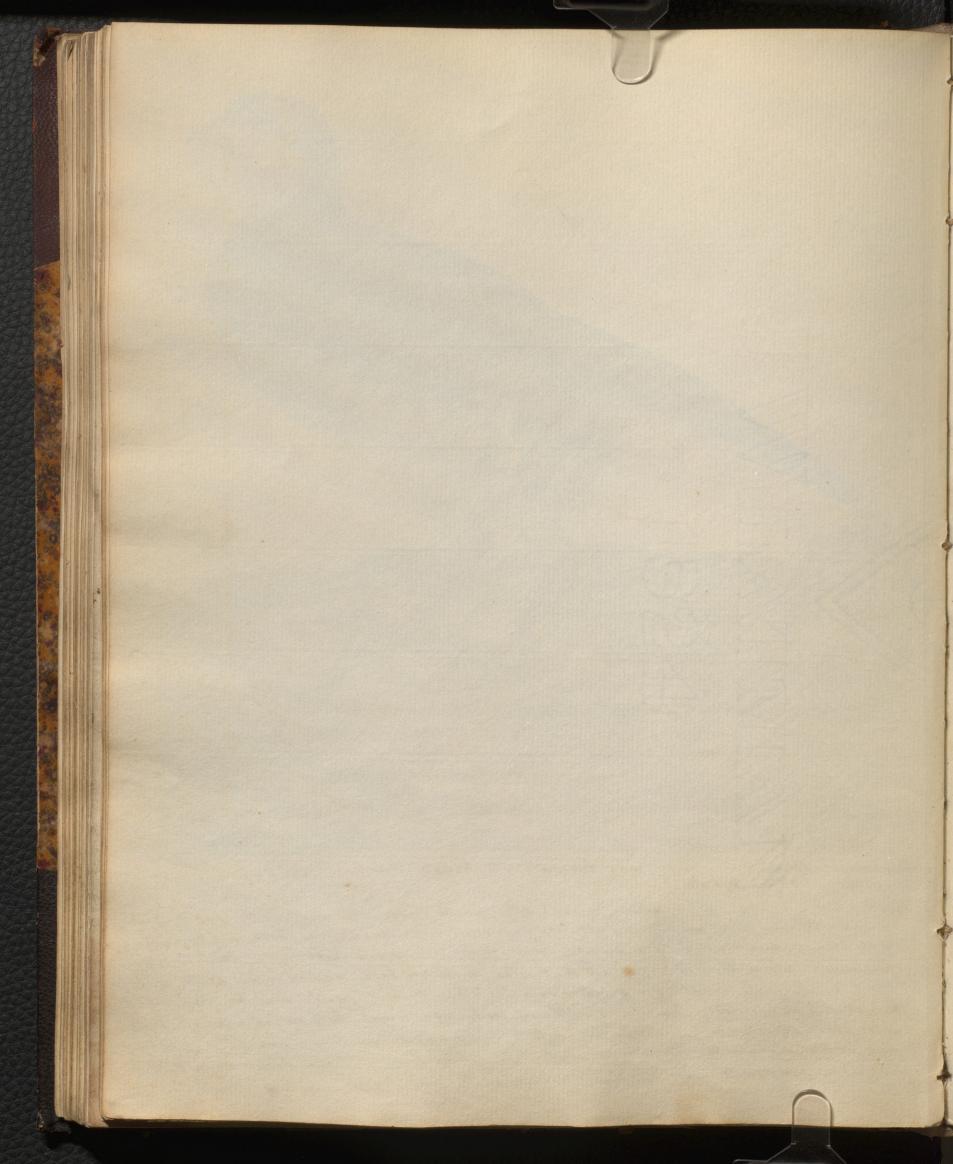


The Black partinge. Tectur. Longth 10/4 - 4 - Bill 16 - Broad 19 % - inches . Tonque soft fleshy . Nostrils at the bottom of a projection. The black on the Throat & belly has a fine gloss. The black of the belly extends to the vent; which is respons, grey, & brown mixed. Inner wing coverts light black, light brown and white mixed. The shoulder and lowerpart of nech feathers have some two some four spots of white 600 the their. Those of the dides of the body have the same but placed like this & . The lowest only being seen, owing to the overlapping of the feathers. Tail 12. The not end barted like the back. 1/3 rd of the tip black. It is hid completely by the coverts. Toel 1. 2. 3. 4 joints. Middle membranes to both the others up to the 1st joint. The lock which this is has a small knot in place of a open. Drawn half eige.

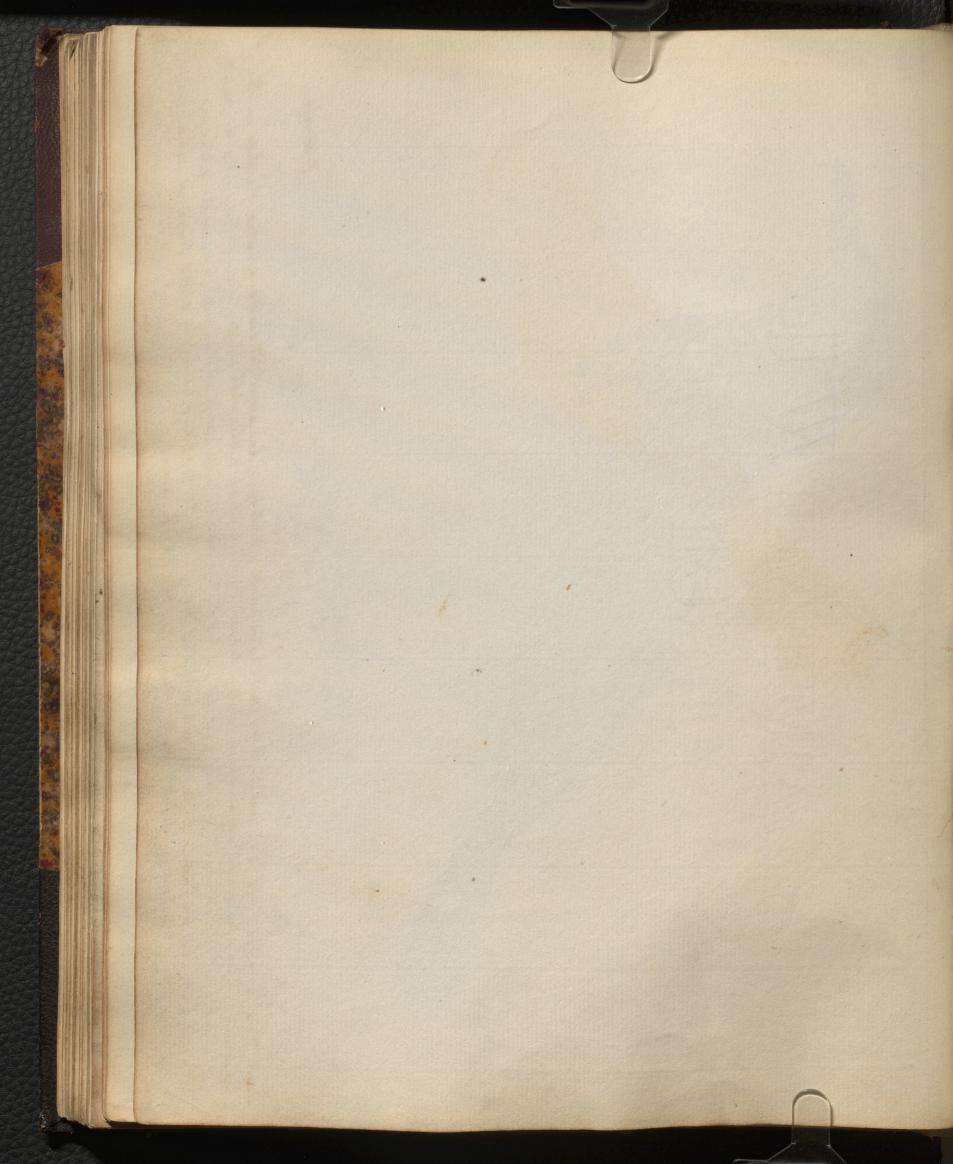
Half wing by wale The Francolin Partridge of Lathorn . Vol 8. 10. 272. Var A. Black Farshidge (Francolinus francolinus). 844 Tig 1. Aly 5th 1828







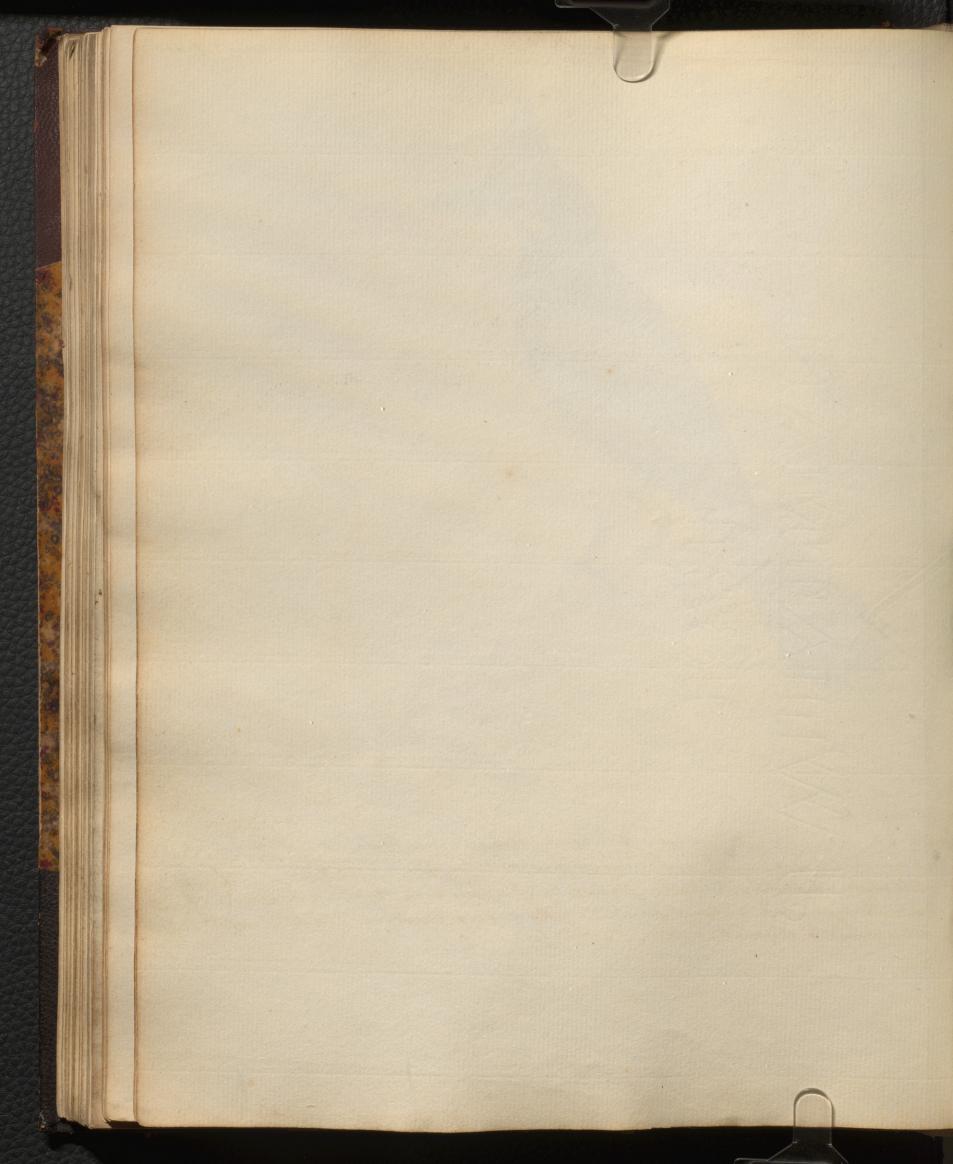






Rajmuhill 23 March. Full-sije. Sc.

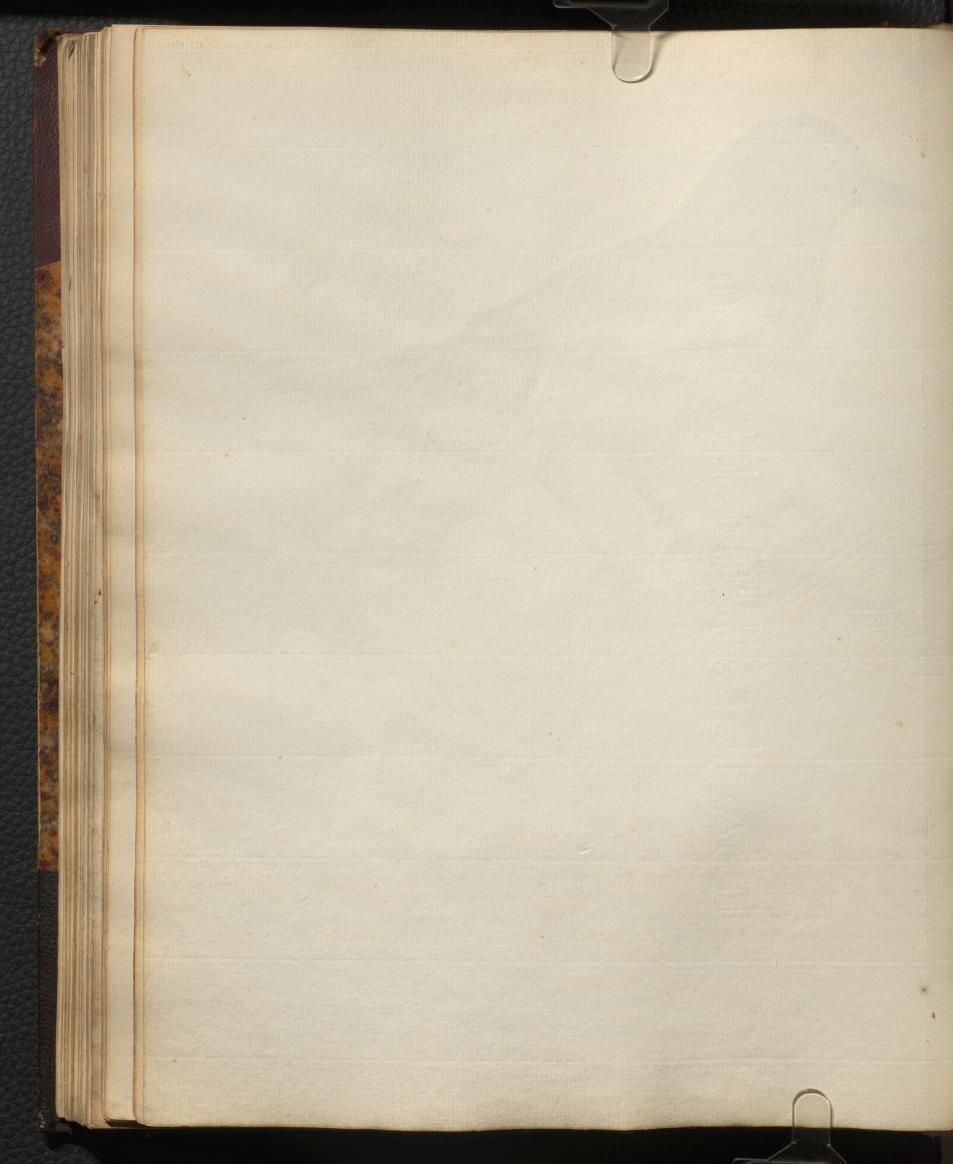
Lingth 4/2 - 3/2 - 3/4 - 11 - inches. Bill has a notch. Tongue fleshy at root, horny at tip & divided. Mill is compressed, Northils in a slight depression on each wide. Inner unique coverts white. Sides like the back, gradually blending with the white belly. Jail 12 all but the two middle tipped with white, outer ones most. Joes 1.2.3. 4 joints. Midtle & nuter joined to 11 joint.





Length 5/2 - 3/4. 1 - 12 - inches. Bill has a notch Tongue thin, flat, divided at the end.

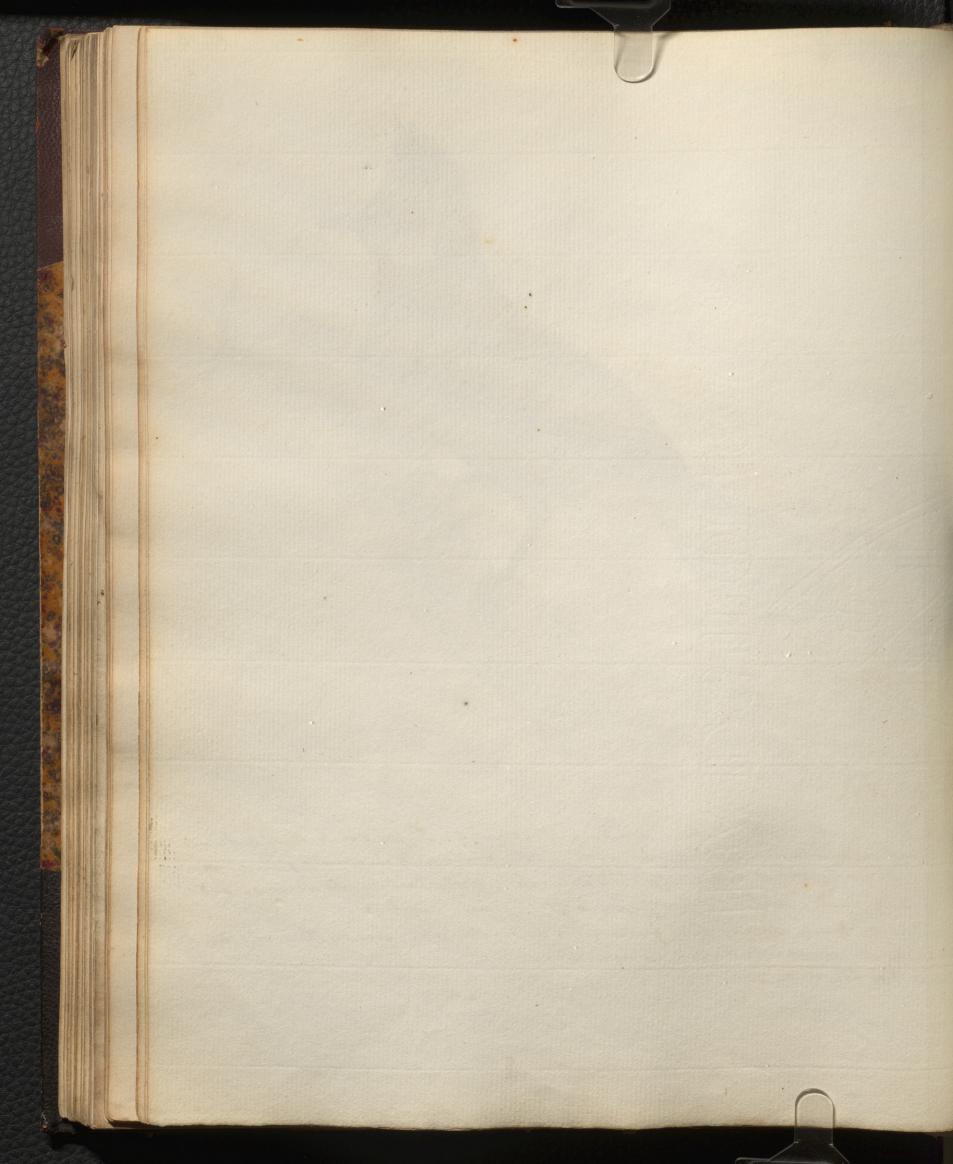
The 4th & 5th quills from inwards have the whole breadth of outer web, white at not; marrowing towards the tip. Tail 12. 3 outer all white except just the rost black. 4th the same with Iniddle joined to outer to 1" joint. Naitill pervious.





Them Detr. 1829. Tull size. Correct.

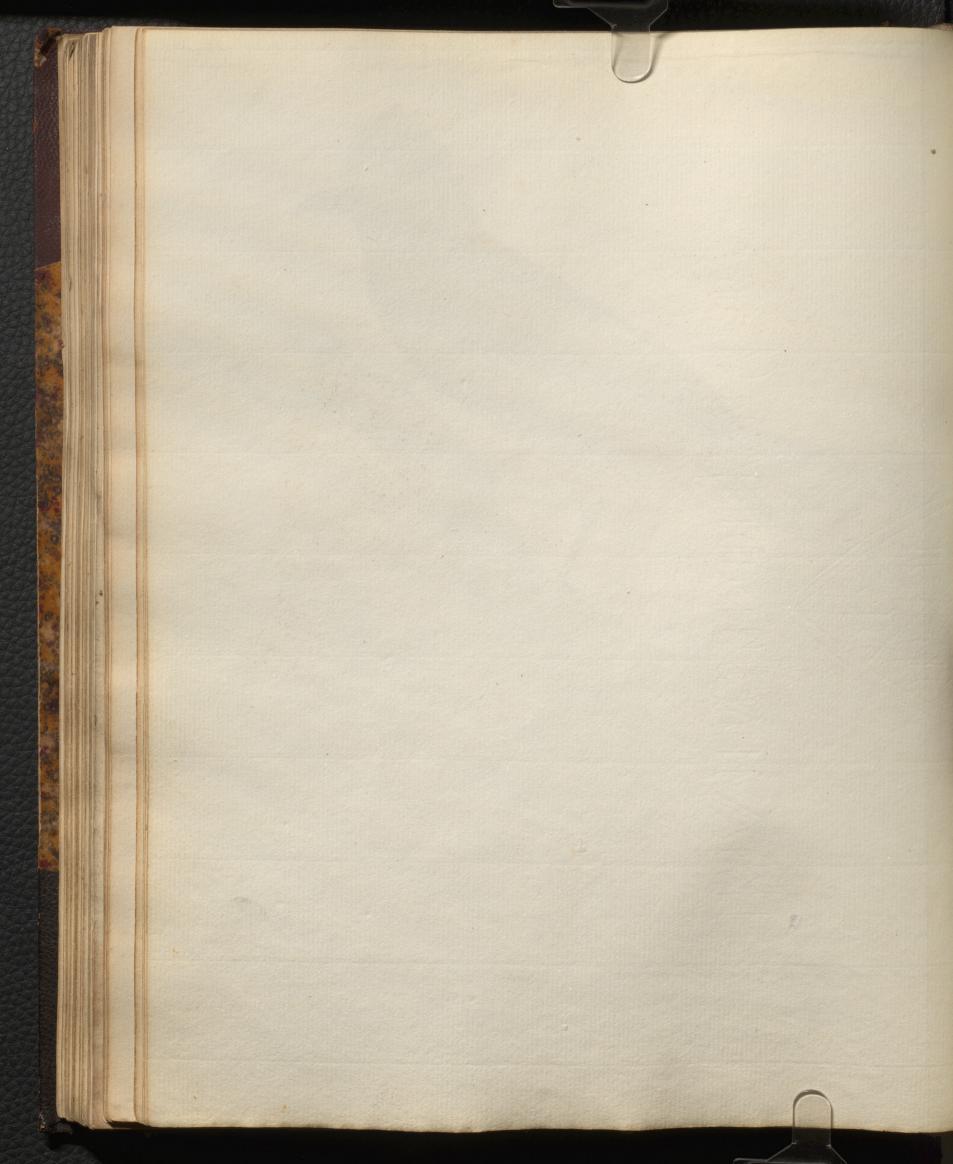
Lingth 4 - 3/8 - 3/4 - 9/4 - inches. Bill has a slight notch. Tongue sharp, thin, & divided at the end. Immering coverts be Belly white with in some a greyish greenish tinge. Under side of tail kathers blackish state color. Under Tail coverts yellow. Toes 1.2.3.4 joints. Middle konter joined to ge 1" joint. Jail 12 -Formed in the Boon & most parts of gurhwall kunder the hills; goes on the cool ridges in Summer, comes into the valleys in winter. Some of These have the tail much more currieform.





Length 5-3% - 9/10 - 12 3/4. Bill has a slight notch. Tonque flat, their, homy, sharp pointed, & duided for some way. Lower part of back nump, & vent, duity white. inner wing - coverts the same. Toes 1. 2. 3. 4 joints. Middle & outer joined to 1" joint.

Found all over Hindostan . (alled Boolbool in the planes . Race or Ghur Kinchoo a in Gurhwall.





length 3/3 - 2/2 - 1/2 - 9/4. inner wring coverts light greenish white rump like back. Tail 12 to making a dort of festion like making a dort of festion like making a foriet of festion like mit Joes 1. 2. 3. 4 joints, middle joined to neter to 1" foint. Tongue horry & divided at the tip. rest fleshy.

Fig 2. A very little longer, but a much itouter & fatter bird. From the breast downwards, & univer wing coverts, grey ish execusish white. Characteristics of bill tongue, & toes the same. Segs & feet rather darker color, with a reddish bonun tringe. The people say they are male (the red one) & this the semale. I saw a flock together, & shot 2 and & 3 of the other sort has the manners of sparrows. Called genowra, Sendure, Soone, unmon names of several sort of Tinches.

Builds under eaves of houses. nest of grafs & seathers wot very large.

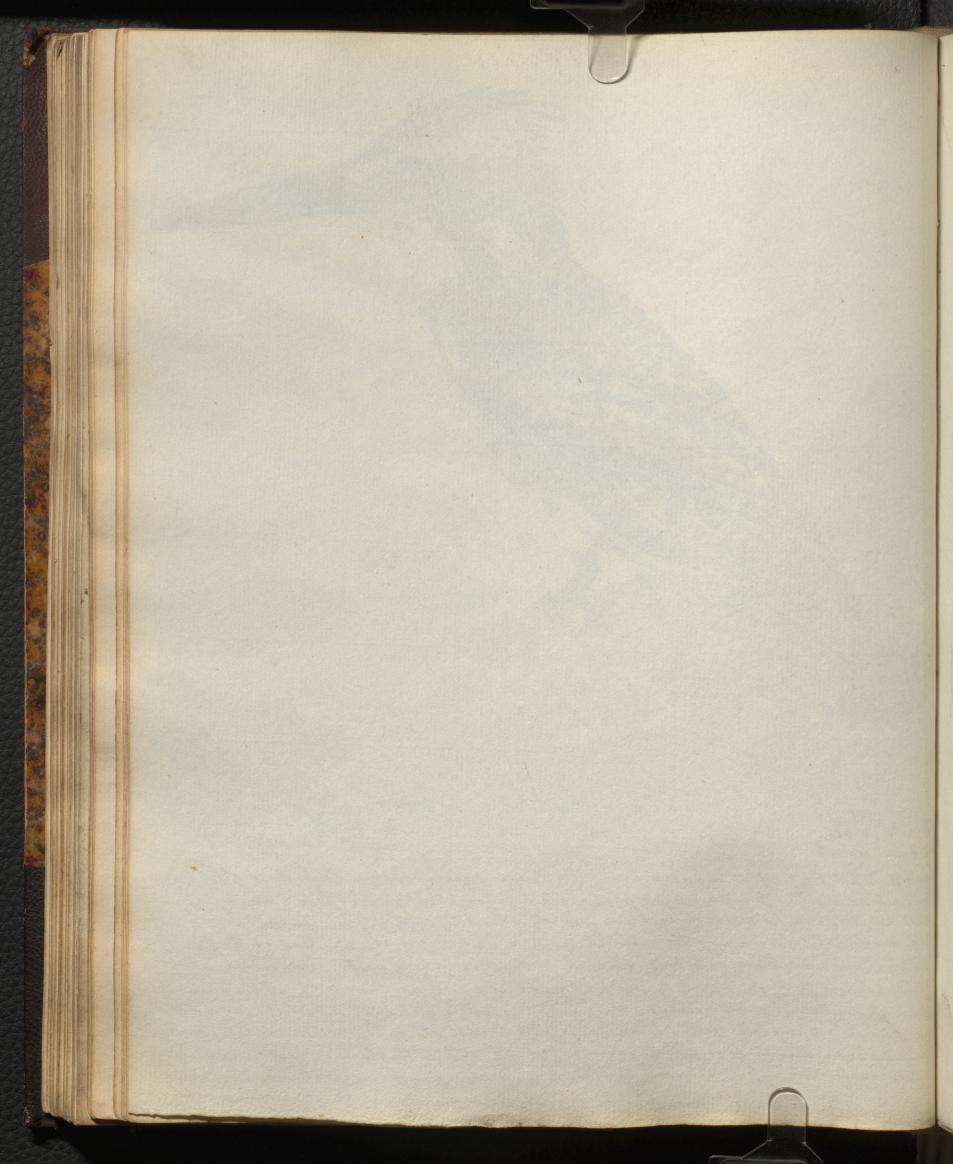
of those I shot some were just finished moulting. some abmost finished.

= more of one or the other appearing, according as the feathers his smooth or rumpled.

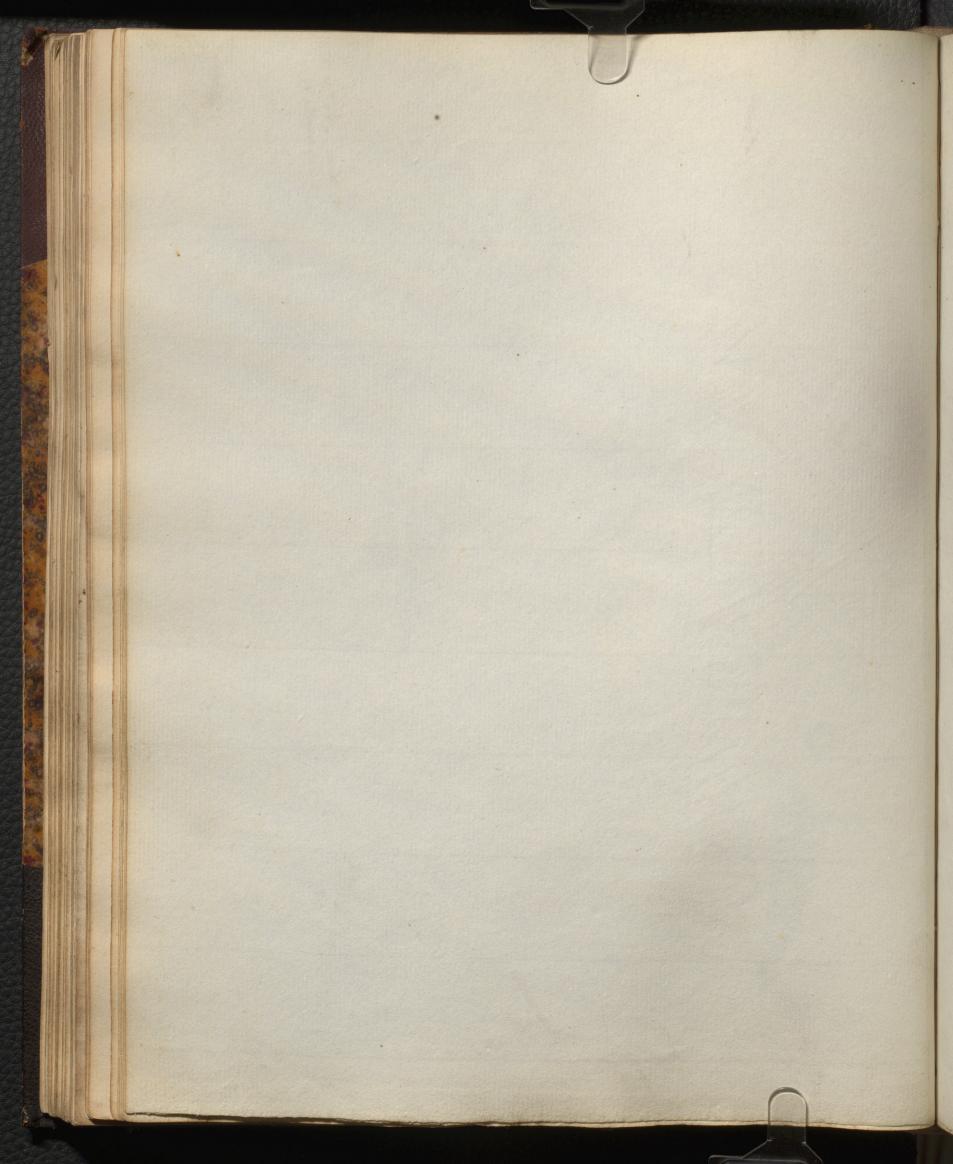
Joes as usual. Called Junga doobee (niverdiver) bonumen all over thindostone. It brought does not fly very quick. often hovers. It generally seizes its prey from a hover, makes a screeching noise. The ends of the mandibles are often thunted, as if made so by crutinically striking against the grown when catching fish in shallow places.

In some the black of the shoulders meet across the breast. and some have even a second sow of black shotted feathers, half an inch below that; making a second bar across the breast the white all over has a beautiful silky glossiness.





+ Them. Nos. 10.1828. meguastes dize. + F





killed near Suhr meerhoor. Length 12/4 - 3/8 - Bill 15/8 - Broad 24/4 - inches. The upper mandible hollow. The under reasty flat, and shuts in under the upper one, so that only the not of the under one is seen. The green of the head and wing appears in some lights blue, in others purple. Sides of the body just under the wing , like the back . Upper part of belly white with a slight dash of yellowish fawn color . lower part the same with some ligh ash colored bars. Vent the same. Under tail coverts, The middle ones black. The sides fawnish yellow, and some of the longest close to the tail are black tipped and edged with yellowish fawn color. The like this and printed. Upper tail overt like these last. Jail which is almost hidden by the coverts.) color of quills. Jeathers much pointed . contained 16 feathers. Toes 1.2.3. 4 joints. The black of the tail coverts (upper) has in some lights a tinge of purpleish blue .



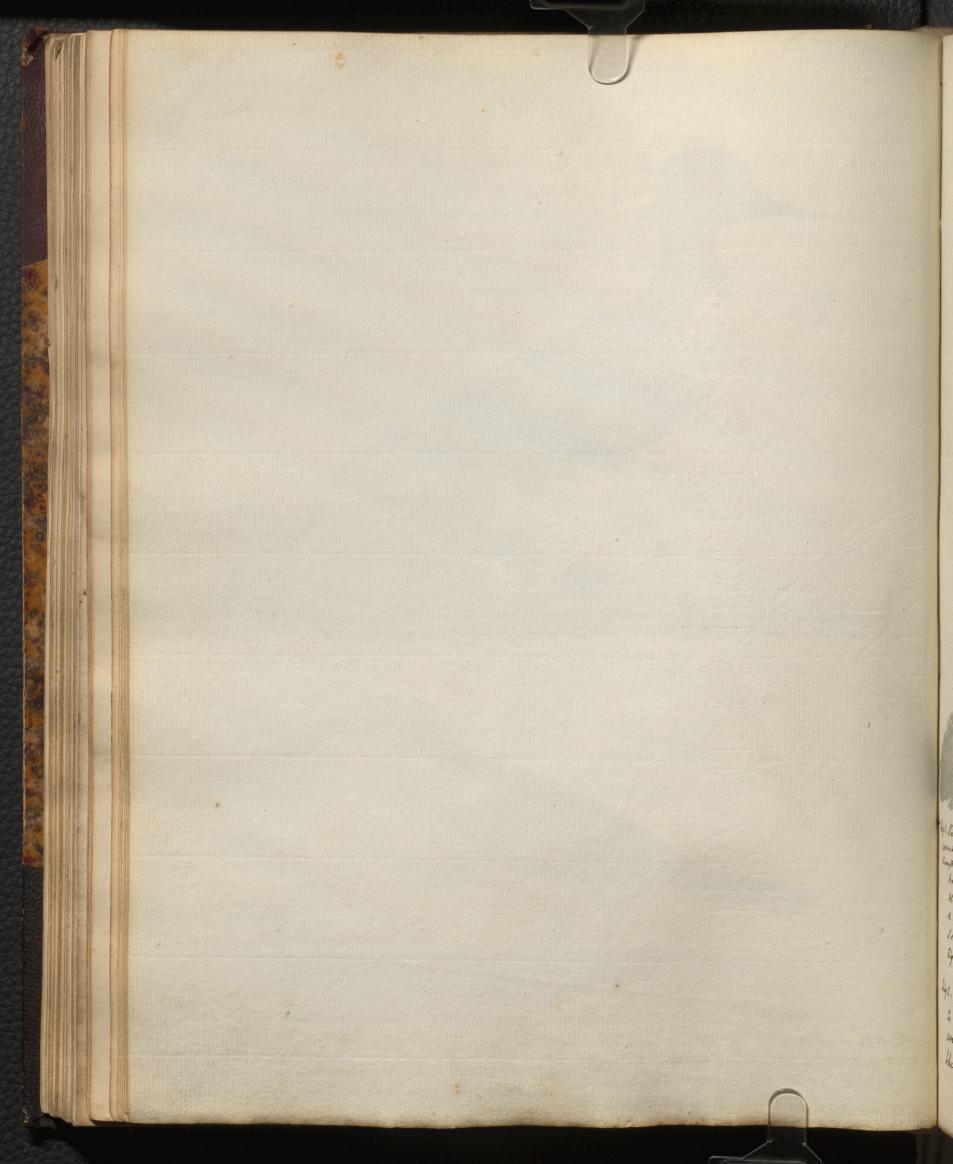
rest,) are H

Kerry



Full rije.

Lingth 3% - 2/3 - - 11/4 - inches. Northils penious. Bill like a larks' inner wing west yellowish green. Fail 12. the outer white on most of the outer web & part of the inner the 20 white at the tip. Killed at Kedarnatih inder the Himakeyah in June, with snow till on the ground. Called by the people there dorince.



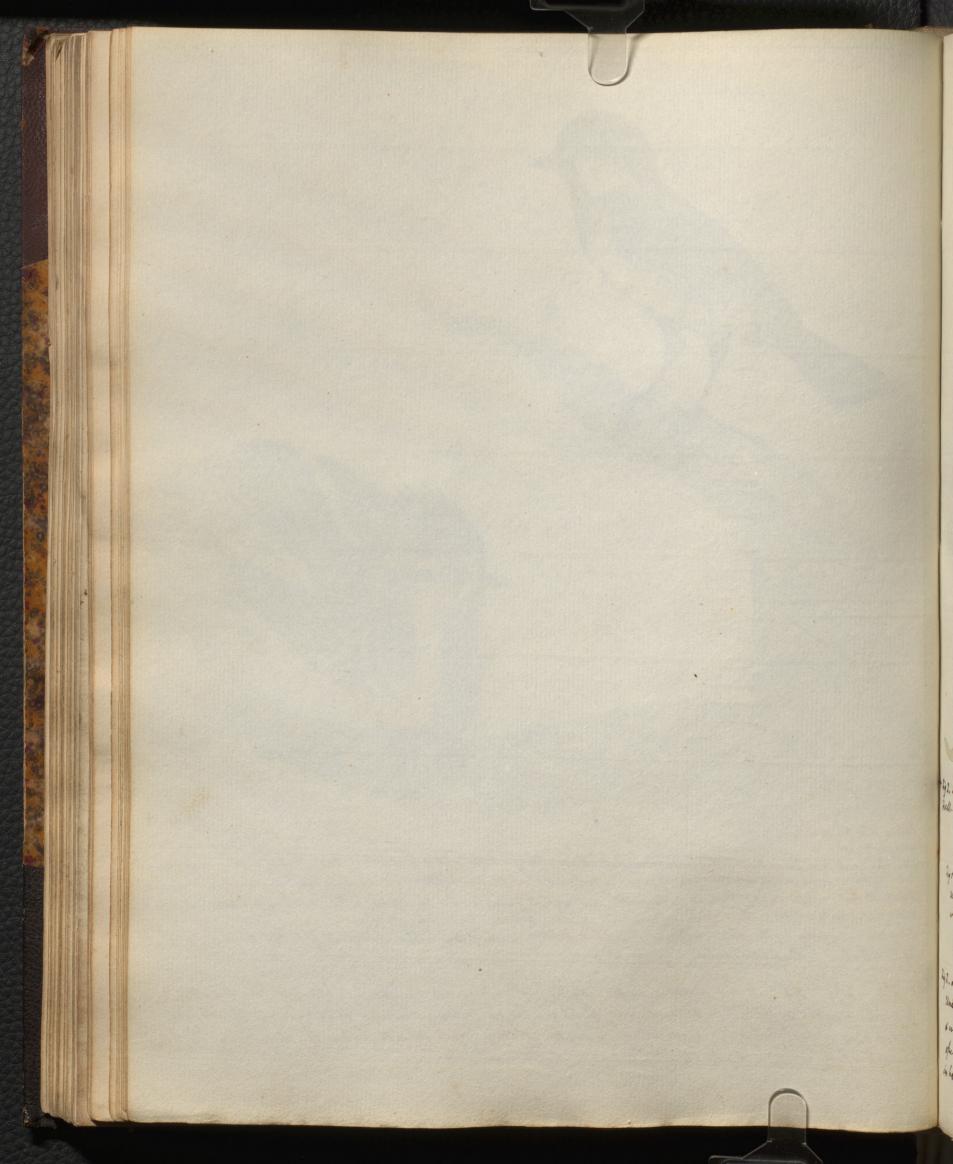


ig 1. Paoree Octr 9 1 1828.

Fig 2. +

Length 27/8 - 2/4 - 1/2 - 8 - inches. Tongue flat, thin, homy at the end & bristled. Nottils hid under projecting hairs. Immer wing coverts white edge of inner web of quills whiteish upper tail coverts dull light-blue. under black at root, white ends. Tail 12. The outer has a white outer web. The others light blue inner bubs all black. I saw agreat many on the ridge between Pairee & colka both of this which I suspect to be the female, & of Light which is perhaps the male.

Lig 2. 3 1/4 - 2 3/8 - 5/8 - 9/4 - inches. irides hagel [not quite cornet in Dawring] black of breast extends to vent, broader on the belly. Vides of body light greenish yellow. under tail coverts the same. under side of tail & wings light blue ish state exter. roots of all body feathers ragged, light blue ish state exter. roots of all body feathers ragged, light blue ish state color. Jail 12.

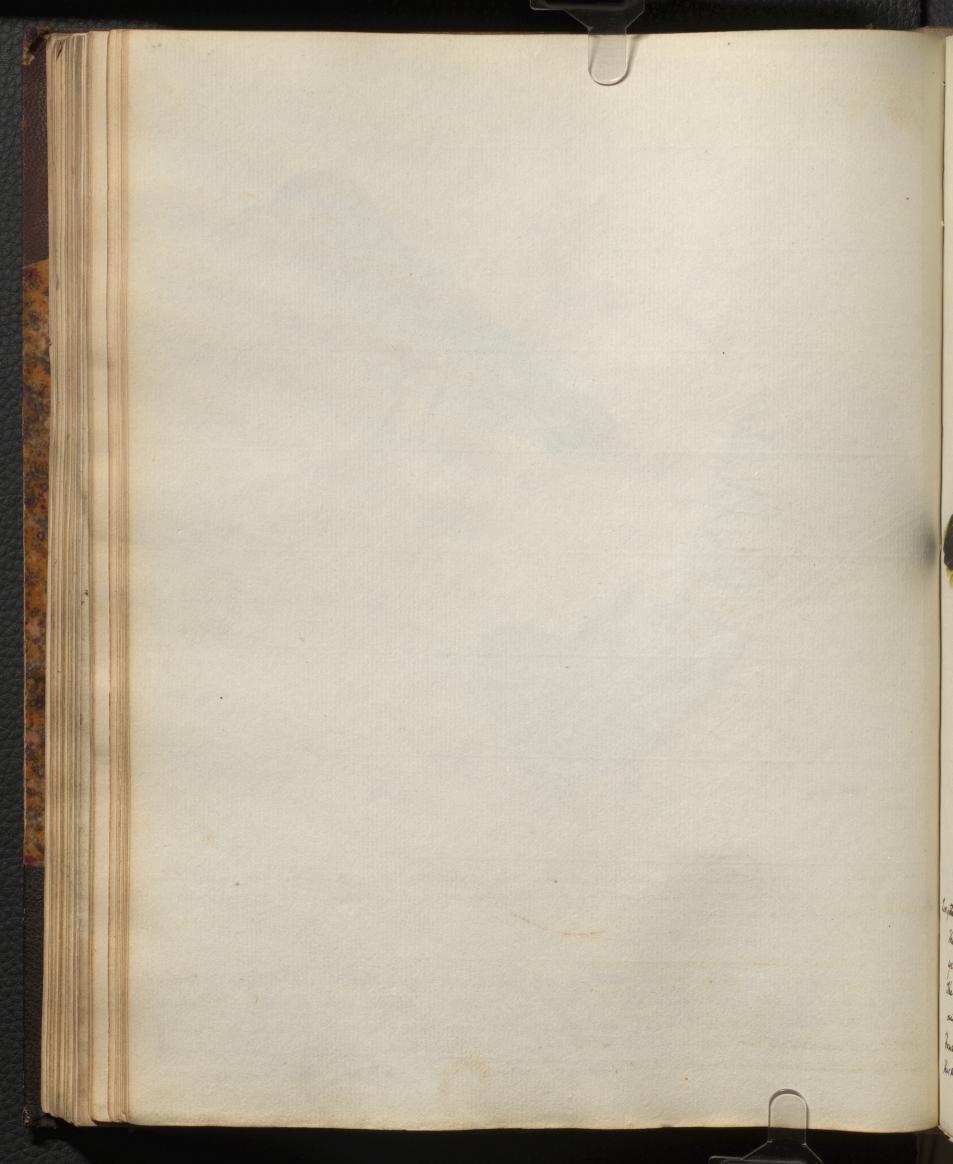




Full size correct.

Fig 1. Length 3 - 2/8 - 9/16 - 8 3/8 - inches. Bill like a warblast. Tonque flat, then, homy, & devided & the end. Inner wing coverts like throat. Helly & below peculiarly delicate Lilky white. Pail 12 - Foct 1. 2. 3. 4 joints. Middle joined to oreter to 112 joint.

Zig 2. Longth 3 - 4/8 - 1/2 - 9/4 - inoher. Bill like afly-catchers. Tongue their vory flat, fromtid, & horny. Under parts wholly like breast. Tail 12. Toes 1.2.3.4 joints. Common in the valleys of Surhwall, & under the Hills. Takes short flights, continually hopping from twig to twig, wvry instant of suring & closing its tail like a fan. (alled Takooleea. Female a little tighter color. Builds in holes in the stone field-walls. Tays four eggs yillow, black & white irregularly mixed.

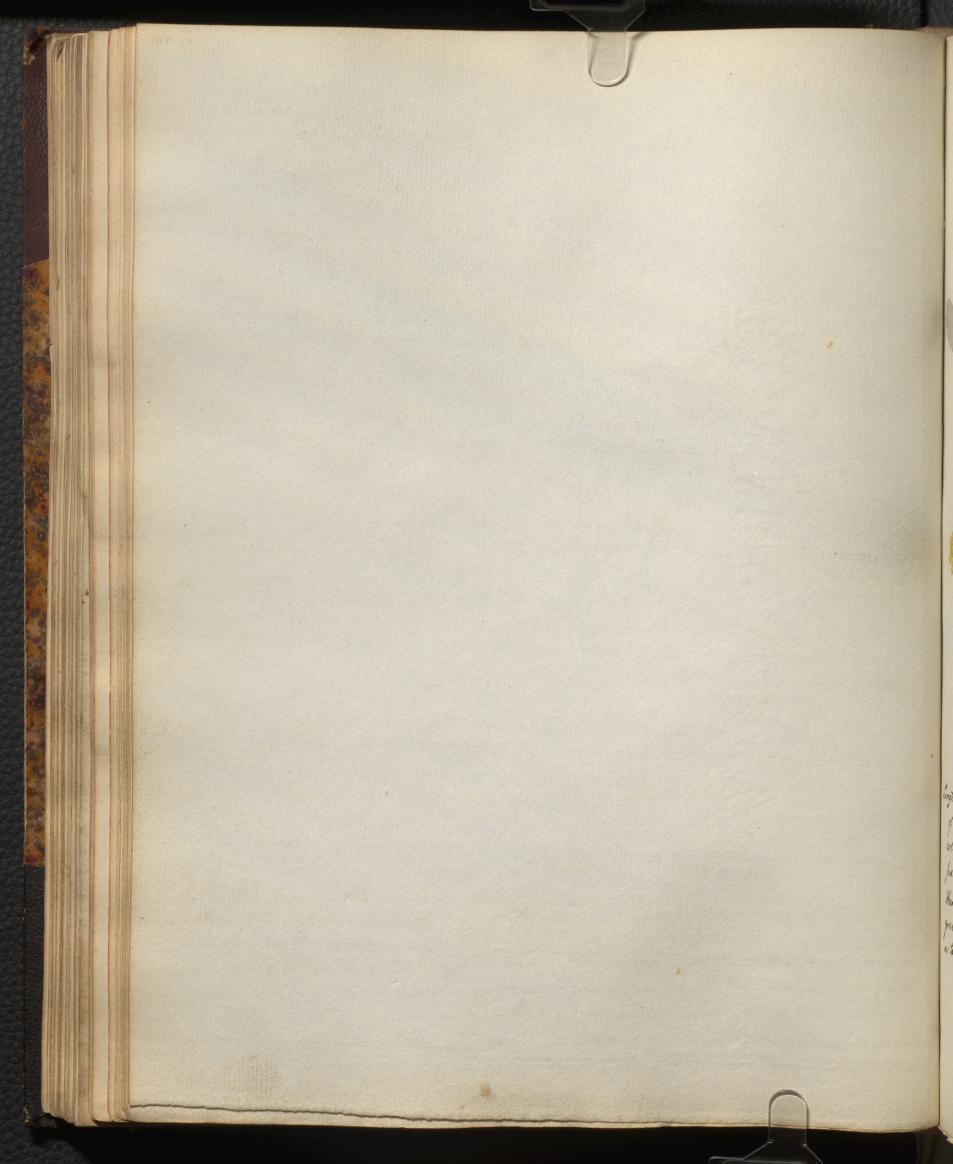




Lingth b/2 - 3/2 - 1/4 - 15 3/4 - inches. Tonque flat, horny, & britted at the end. Eye-list ainercoid, the wing patch is by the cuts of is or b of the longest coverts being yellow. Timer wing coverts yellow. Breast feathers of some have a light grey or ainercous stroke down the shaft. Vail 12. The two middle yellow at the root, gradually darkening towards the end. Middle & outer took joined to fish joint. Claws hooked & sharp.

Found all over Thindostan, Surhwall, & hud in in general in short.

Thisk that in pt. 23. are probably varieties, or differences of tex.

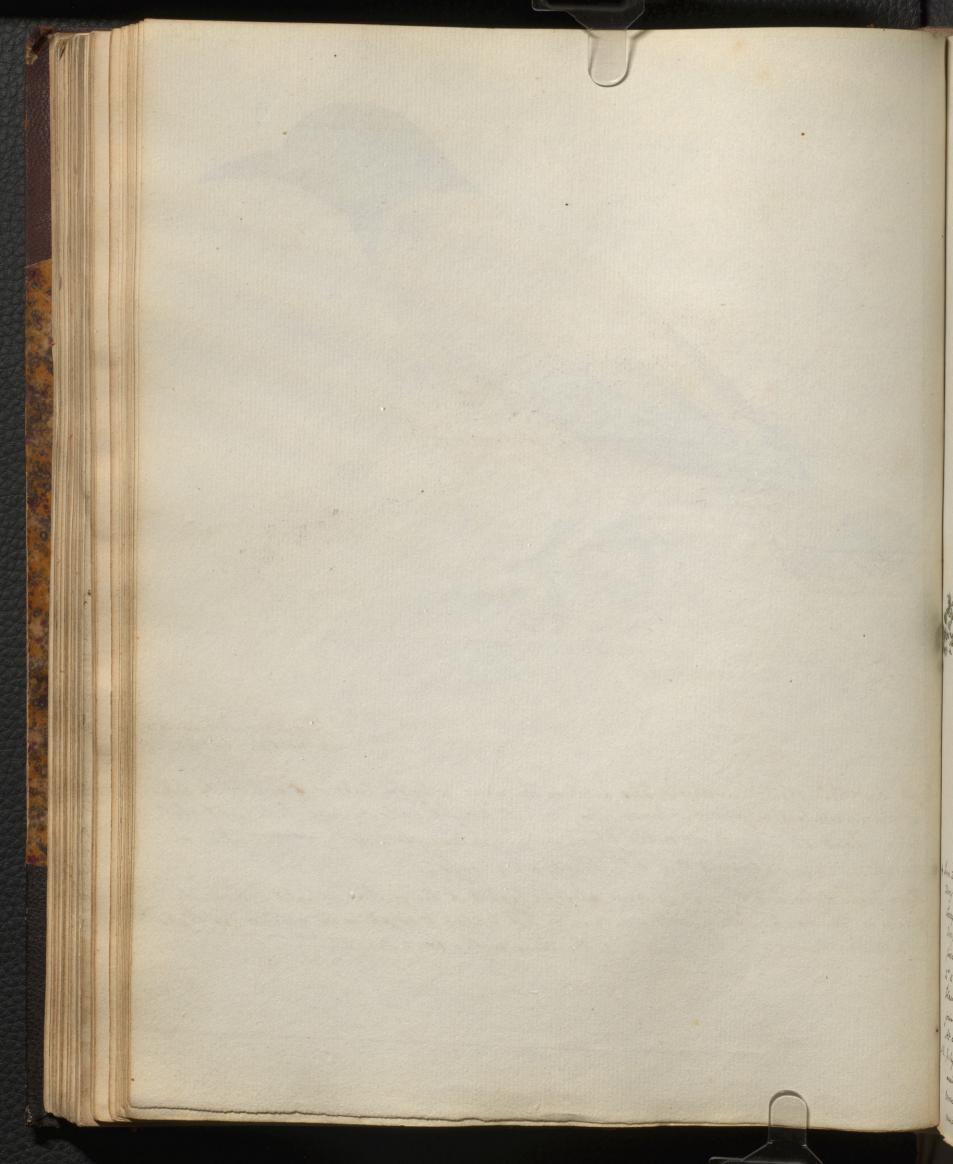




Hurdwar. Nov. 13. 1828. + Hullsige. Lee Vol 1. M. 33.

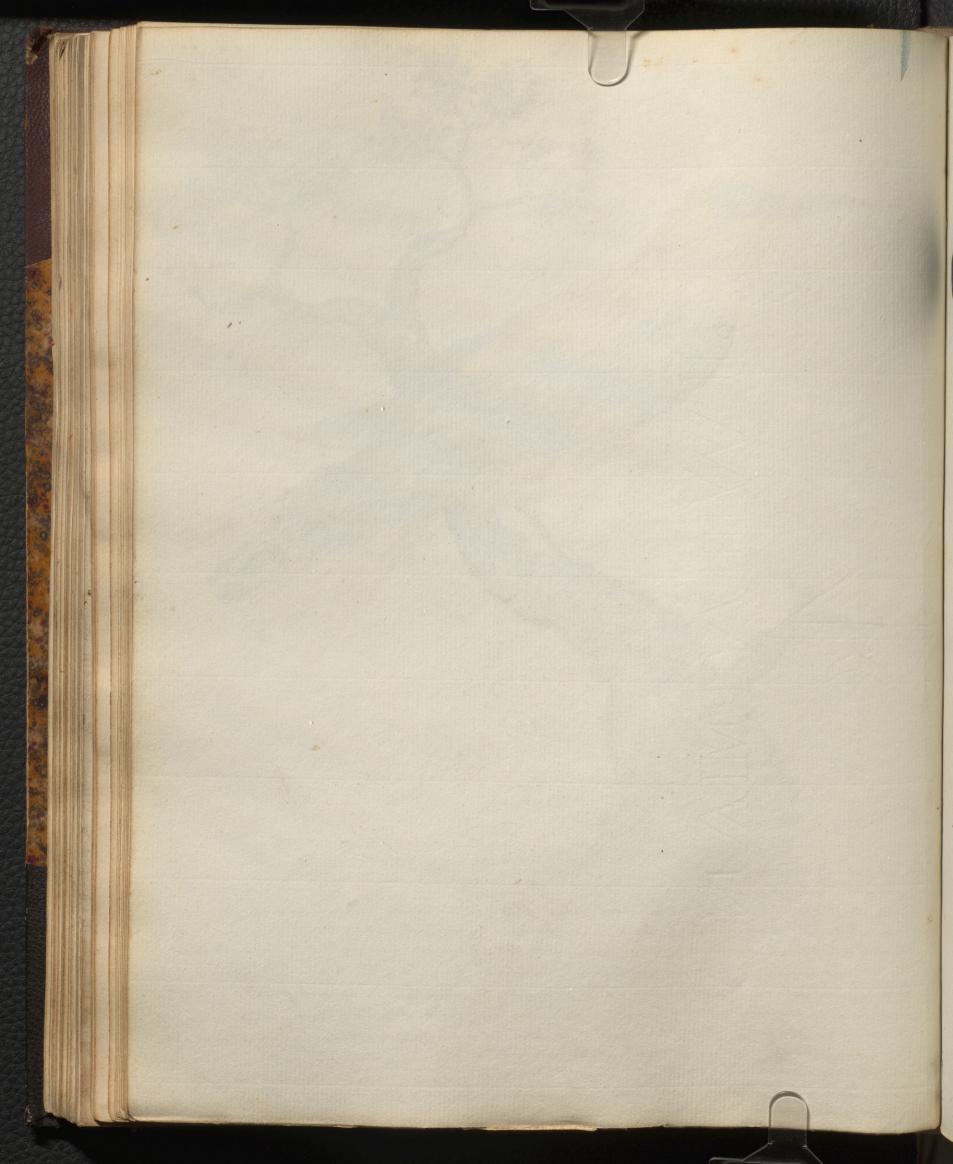
Length. 6-3%-13/8-19-inches. The patch on the wing is by the ends of son & of the lifes of the coverts being spellow. Inner wing-coverts bright yellow. eye-lids light state color. Fail 12 the three outer black only on outer web. 4 the has a patch on inner also. 5 th x 6 th black all across.

These birds differ a little . some have an some lights a tinge of very light blackish green on the back. The quills are more or left tipped & edged with yellow, so light as to be sometimes almost white. & the fails differ sometimes by the sometimes almost white. & the fails differ sometimes by.

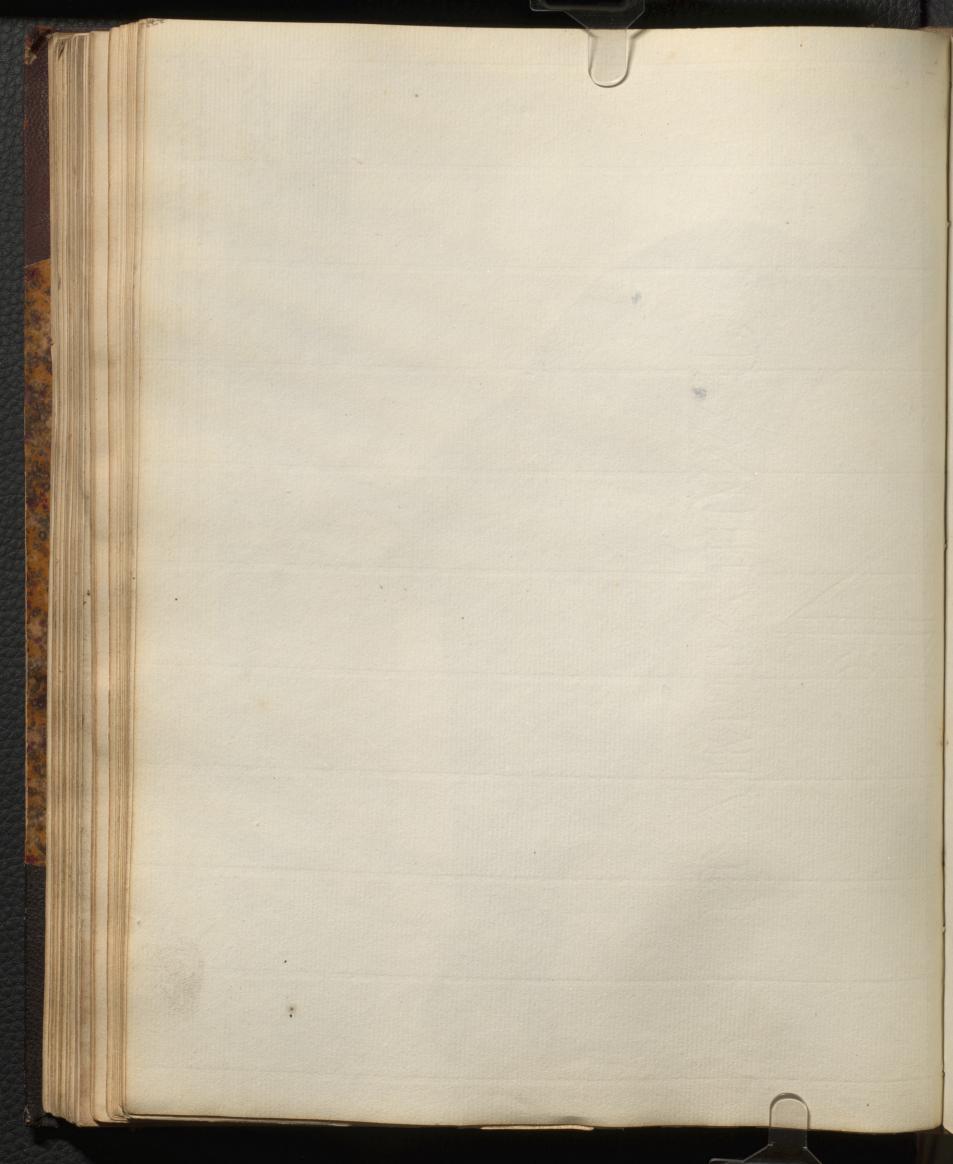




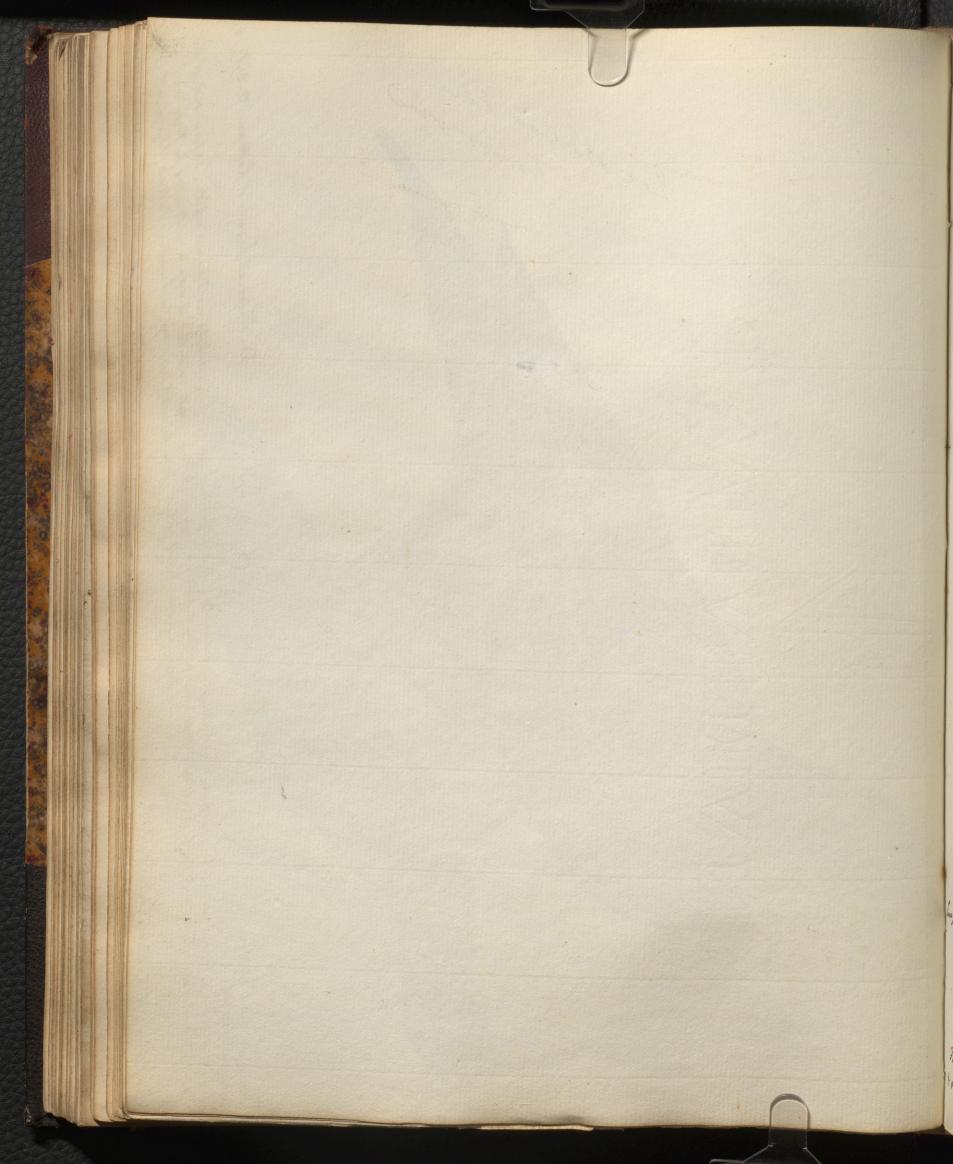
Length b/4 - 3 /8 - 1/4 - 15 /8 - inches. Bill hooked, with a small notch, nostrils in a shallow hollow, singue, thin, flat, homy, divided; & each division bristled. Eye lids dight blue grey. irides red. Wrigs fine dead velocit black. lighter on outer quiets. winer half have yellow tips. 3 % 4 the object with light gellow, black on inner week flat, so inner coverts yellow. Jail 12. Iwo 1 th u 2 rd as drawn, 3 rd have a little joint. Middle & outer joined to 1th joint. The yellow wing patch but 1/2 an wish of life. Toes 1.2.3.4 At comes of moutha few just perceptible hairs. The yellow wing patch is on the larger coverts. He know ye quiets, MB. July 4 caught one just leaving the nest. all the upper harts greenish yellow. The feathers of wing correct brown, inner yellow. Under the hack, tipped & edged with yellow. Every tail author has onto well middle of each feather. Under white with a sikky gloss, kyllow ish trage. and a hown shipe in the













nigth. 6 - 3/4 - 8/10 - 153/4 - wiches. Inner wing coverts like the breast but a little darker. Upper part of back brownish Hack . hidden by ye wings . The green should be a dark . golden green. The roots of the feathers are black. Greater full bye.

quills a sort of chocs late-brownish-black. with the edge of viener webs rusous. Under Tail coverts, like, but a little darker than, the upper.

+ Fraun from one killed in a cage & from a living one Joraj poor Tely 19. 1829.

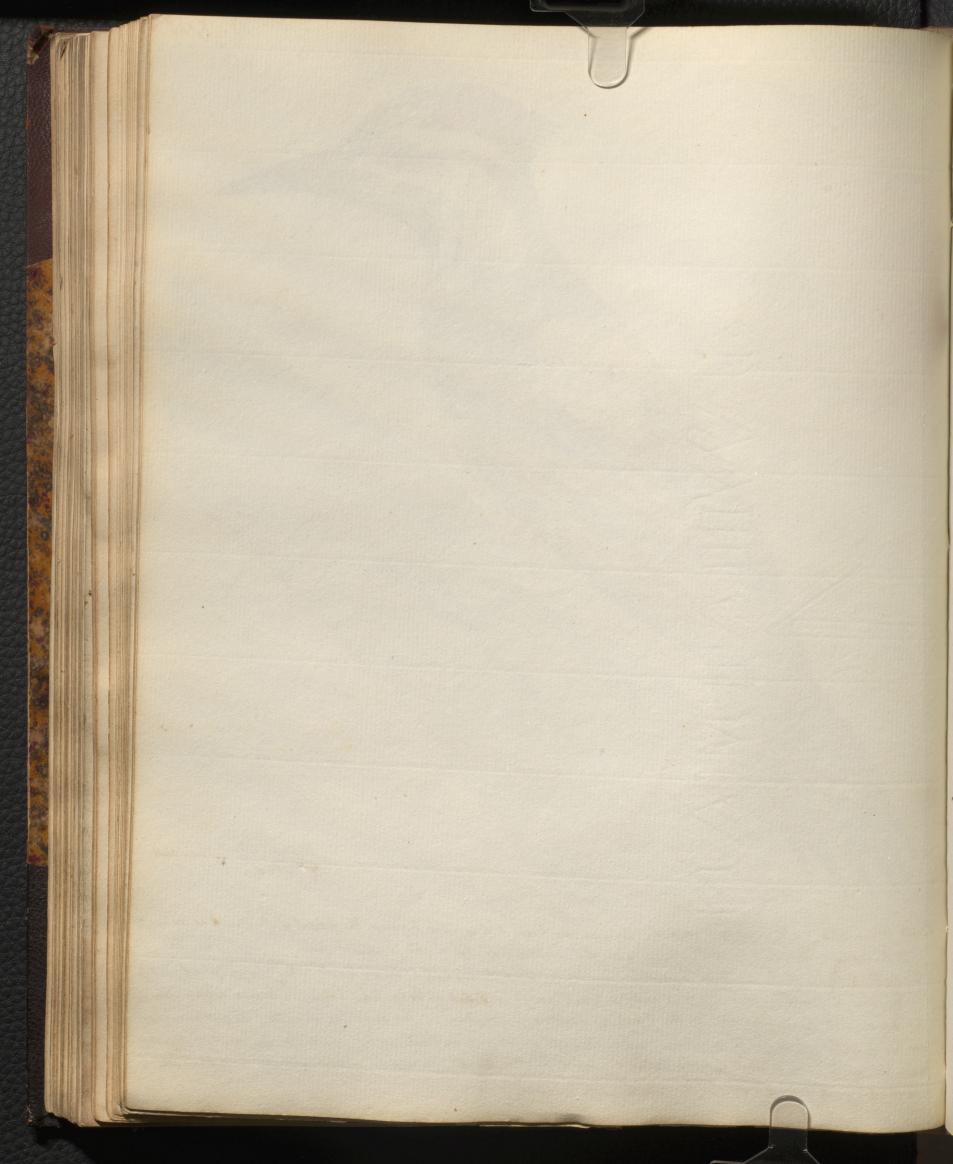
Found in the warmer parts of Gushwall. called there son - googee. + world by a second & narrower bar of grey-ith white.

The finale is said to have a less crest, to be black where this is red; in other respects the same, but colors not so bright. I have seen them larger.

Pl. 27.

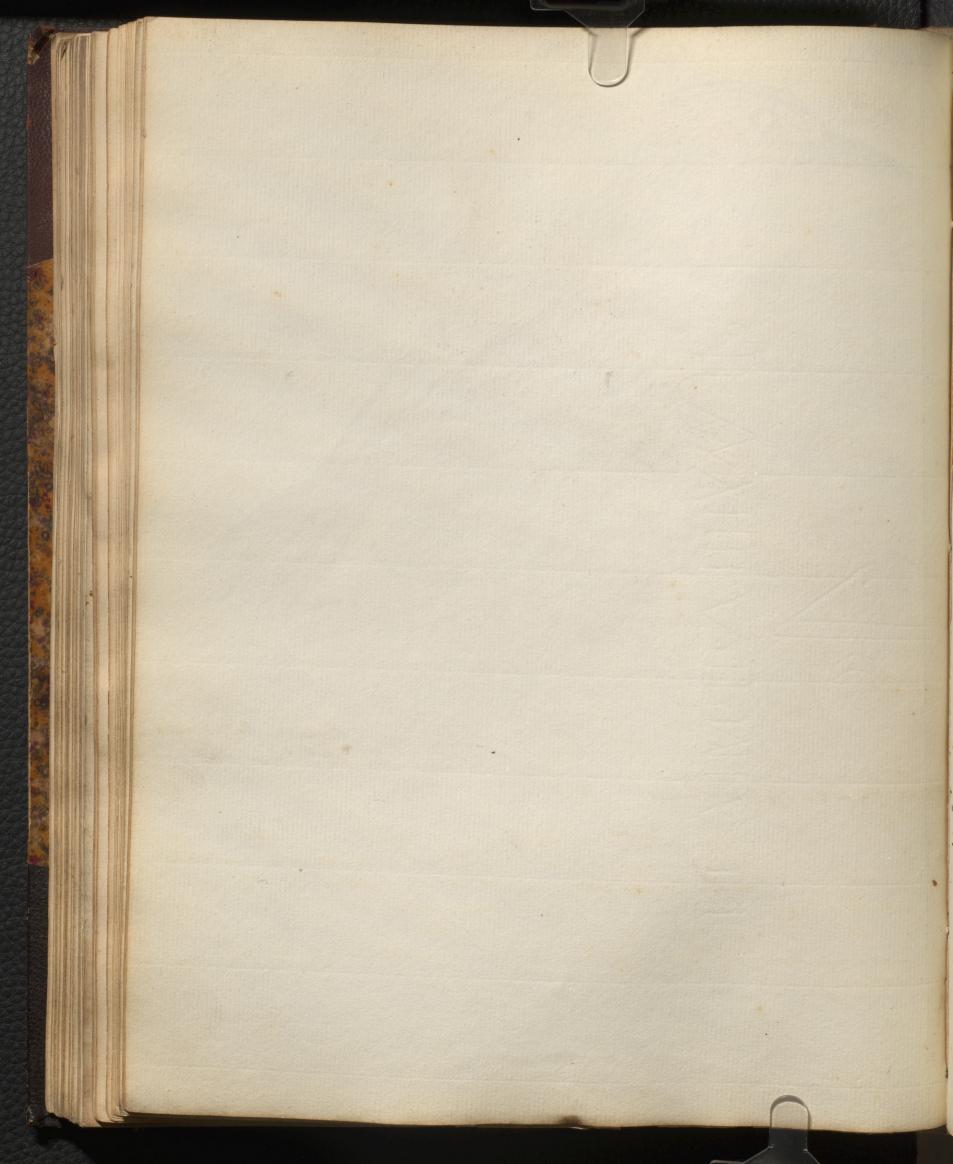


Longth 7/2 - 43/8 - 13/4 - 19/8 - inches. Tongue can project to inches beyond the point of Bill. It is connected with the brain. The white on the freheed is on the centre of the lip of the feathers like 3. In the throat the middle of the feather is while 5 towards breast k lower parts. The black gradually diminished & grows lighter, leaving only a light fringe. I idea of body like bolly. Inner wring courts the same, but the colored edge of the feathers darker & broader. The smaller quills (the gellow ones) are black with while spots on viewer webs. Held of quills so on both webs. but in the middle quille, the white spots have a tringe of dirly yellow. lower hart of brack, rusup & upper coverts fine dead black. Toes 1.2.3. I joints. inner to brustle as to be esteleft.

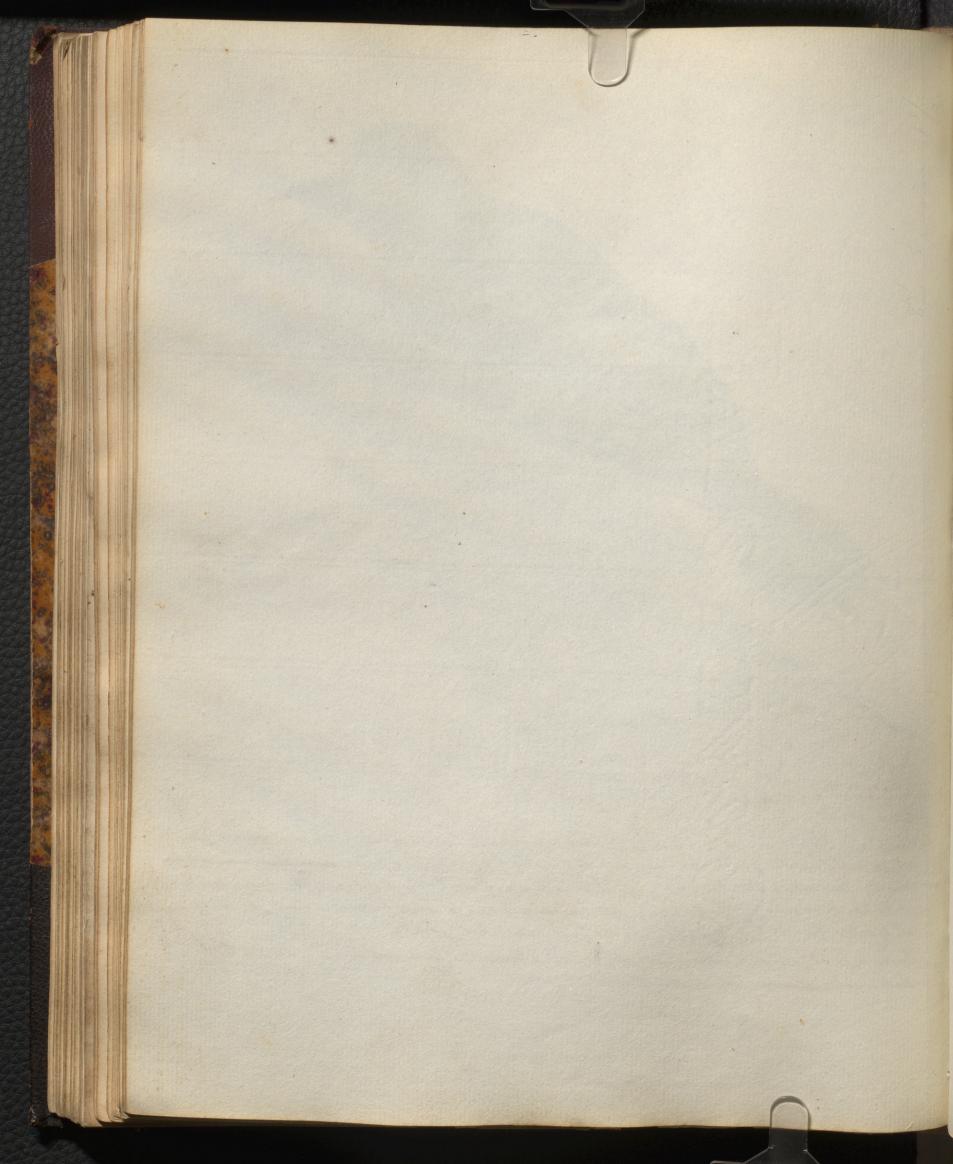


Lingth . 7/2 - 3 - 13/8 - 16 - inches .

Hurdwar. Nov. 13. 1828.



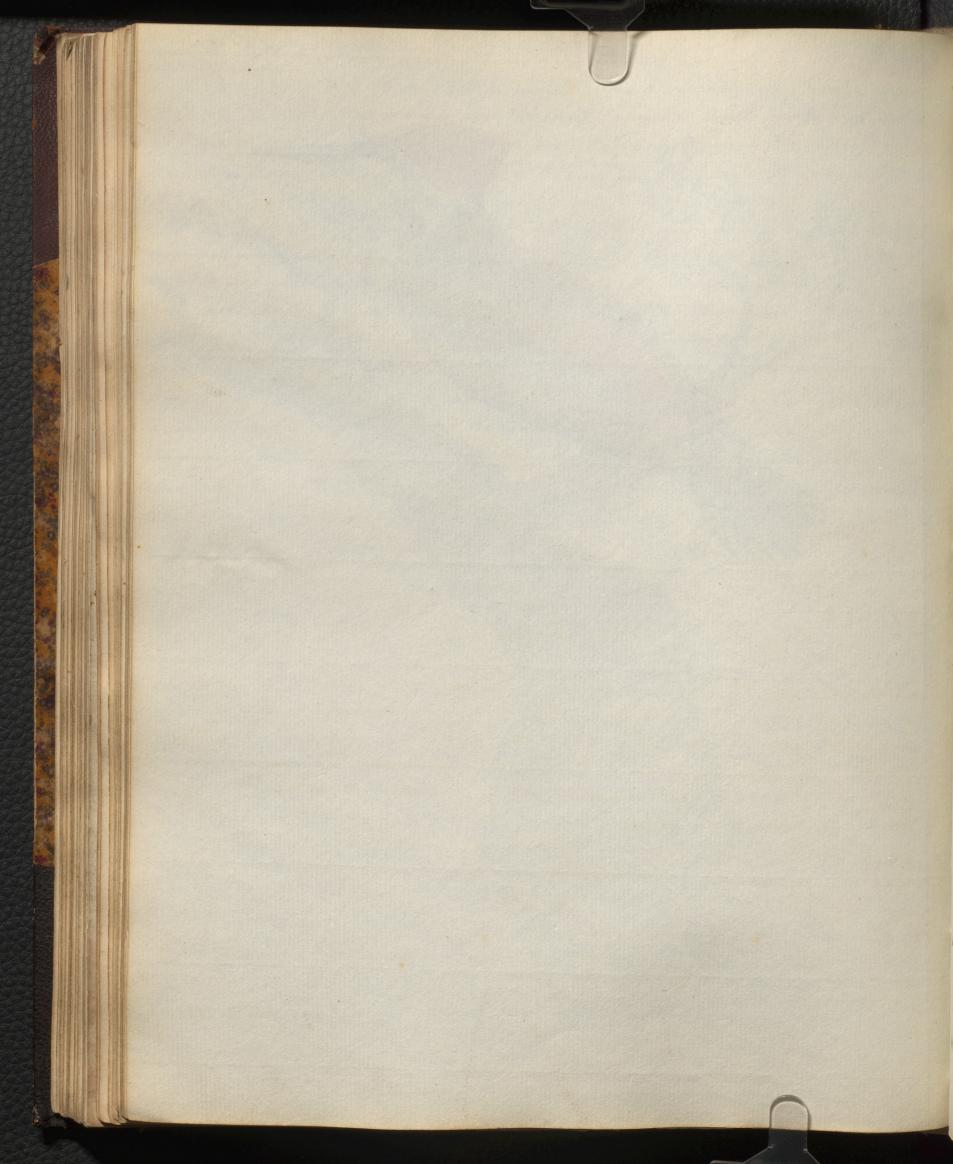






Tilles in the Doon. Longth 81/4 - 43/4 - Bill -13/4 Broad 201/4 inches. Tonque round . toft fleshy, except 3/4 with of the end, which is horry, pointed, and furnished with barbs. it is former lake that of Vol. 1 . Fig 2. Pl 38 . can project hy inches beyond the point of bile. irides light trownish red. The feathers of the back are whiteish at the base which says not appear) light brownish green in the middle and fringed with redorsh yellow. The inner half quills are also triged with that color on their outer web. which where flying in the sun / for it has a silky gloss) ques it a splendid vermillion appearance. The outer half of the quills are black on the outer web. The whole of the quills are black, with white spots on the inner webs. The breast feathers have whiteighalts and for a little on each side. Eight brown on each side. Lower part of breast, belly, vent and undertail coverts, the same, but the whiteish eream-color is breader. Lides of body, the same in the middle of the feathers, but edged with light black. Timer wing coverts like the sides of the body. Toes 0, 2, 3. 4 joints, i.e in the room of What should be the inner back, it has mly a strent. Two front membranes together to the first joint. Claves hooked and sharp, brownish hom color. has a shrill screeching whistle quickly repeated. Tail 10 . Hack Let on half way what appears the red rump.

Pl. 31. hy, wy · d'4) mitdle ce / which llow. a when ence, wills an am color trights of hely breedy ht Ha · e ju Two from mun 10.12 + Fig 1. Febry 13. 1828.





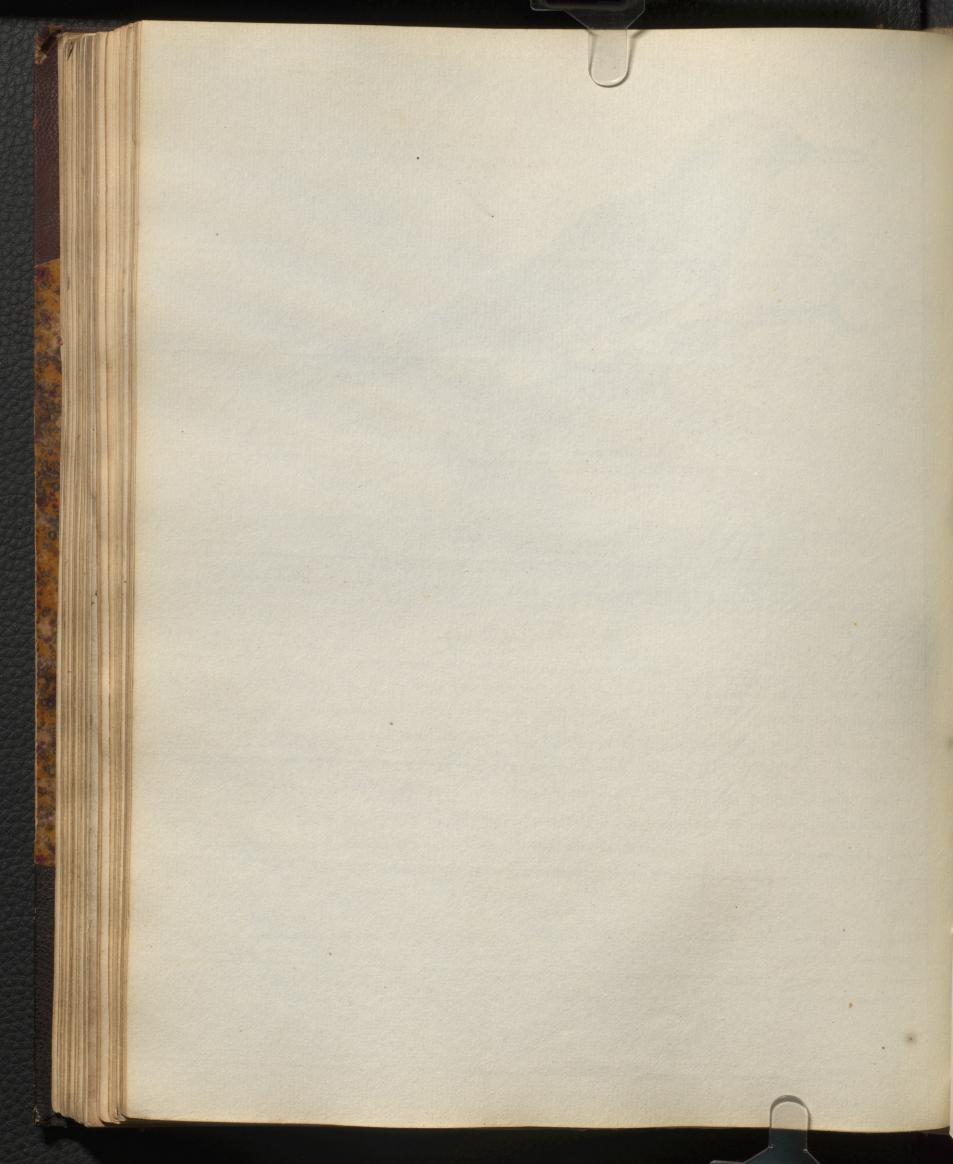
Febry 18. 1828.

Biens Occipitalis

Length. 91/4-53/8. Bill 11/8. Broad . 193/4 - wiches. Longue that of Dol 1. M. 38 Lig. 2. but can project 4 inches beyond the lik of bill. Nostrils large hid under bristles. Under parts wholly green. all the quites have white shots on the cinner webs. The two or three outer, on the outer web. The middle quills have shots of yellowish green on their outer webs. Jail 10. Joes 1.2.3. 4 joints, winer back half the size of the inner front.

This might seem allied to the one above mentioned but it is a longer a layer bird besides being differently colored. Said to be the male. The female similar, except the head, which is all red, instead of black and red. Called Lacha. Tays 3 or 4 eggs. June white.

The former presominating on the fore, the latter on ye hind past, it few red specks on the forchead. The bides of the head were dirty greenish ash, blended with the black above instead of being districtly divided a huiles outer, dirty greenish, blackith, brown. The white spots dirty.





Fullsije.



- Parese Sept 14. 1828.

Correct, exsept that the fail is a little too dark.

Indian Swift (Micropus offinis).

Length . 3 1/8 - 1/8 - 1/8 - 12/4 . Breadth of gape 3/4 - inches . Bill a little kooked . Northils this shape 30 surrounded by a low rim . Breast & belly his back, not quite to dark . Vent, under tail-coverts, and inner vining coverts, color of tail; & the feathers slightly fringed at the end with anexams . Tongue broad at root, flat, not very thine, fleshy: push at the honey & divided . The sides of forchead project over the eye a little . Tail 10 . Legs feathers to toes; which have cach only one joint . The whole of the feathers have more or left a gilded-greenish, bronze gloss . builds under the eases of houses .

Indeed gootnee / a generic name, the female is a little smaller, not quite so dark colored . rump & under parts light blackish bronze.

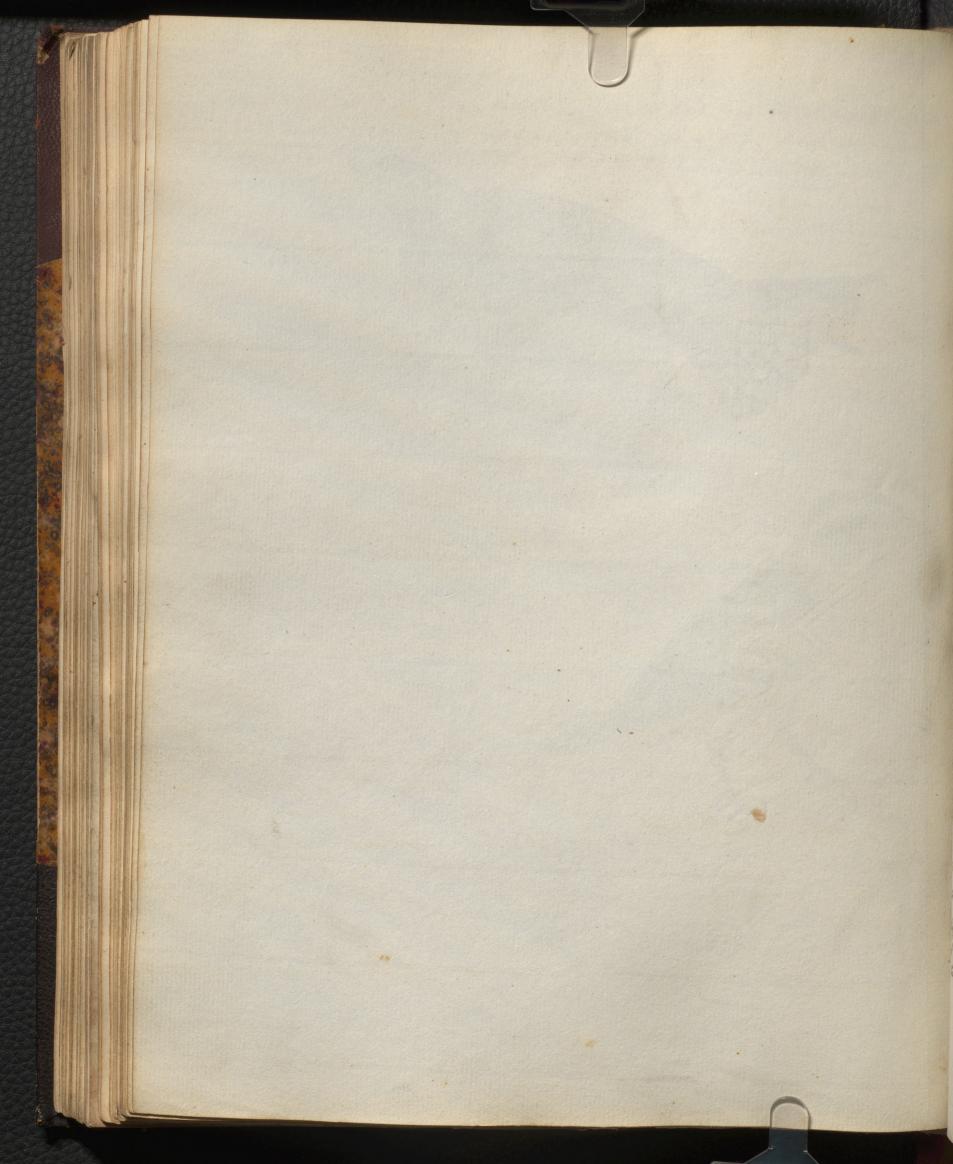
Tog 1. 26 Jany. 1828.

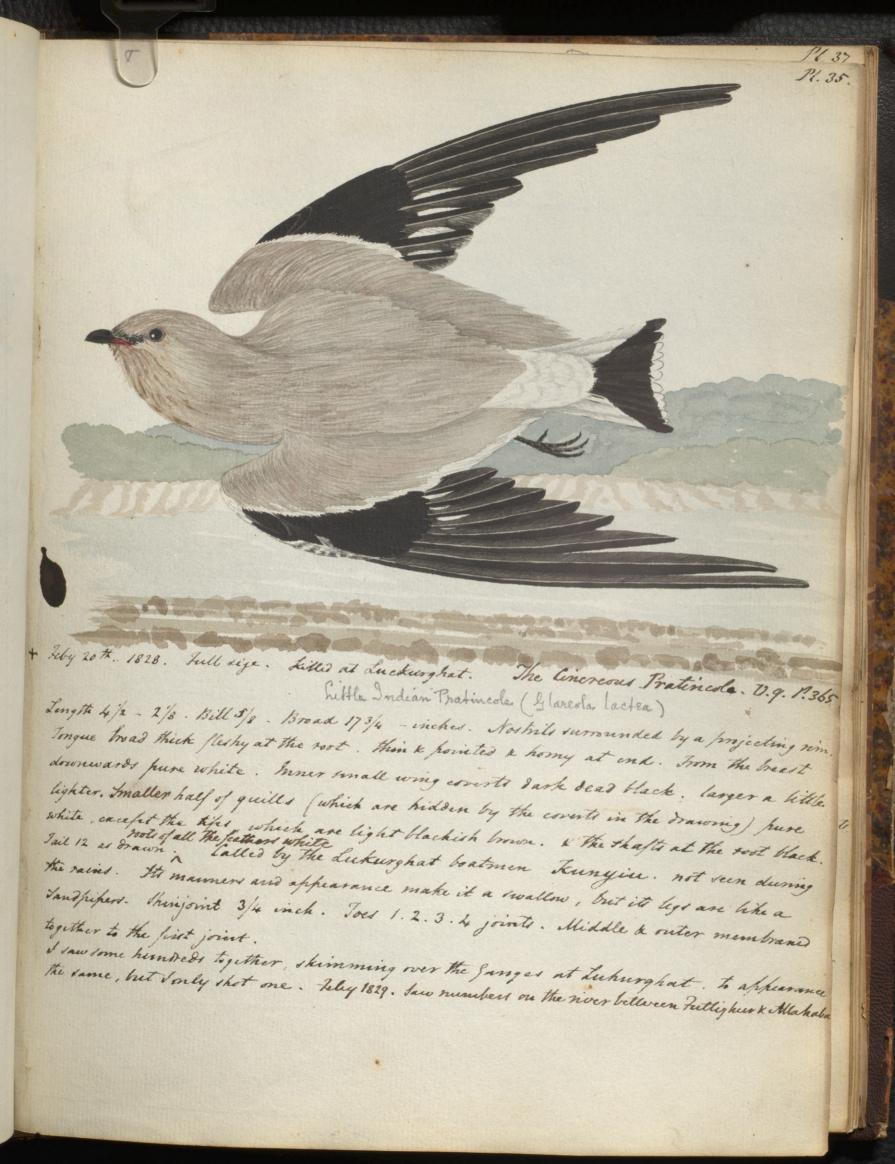
Littled at Hurriman.

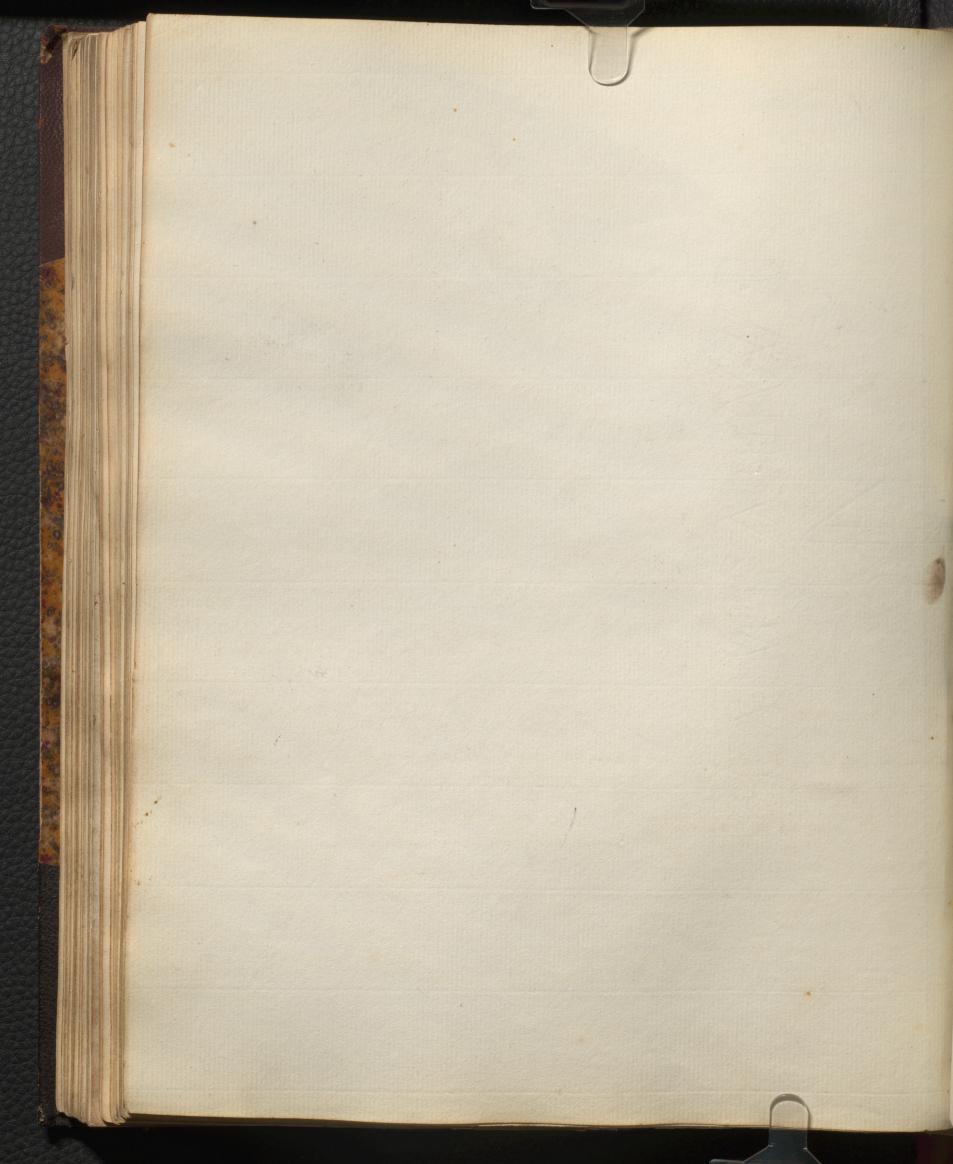
Length 374-276-Bill 9/4. Broad 13 % wiches. Under hart from throat, durty while with a pink tange, to the tail coverts which are like the upper. Imer very covert a little darker than the order. Tail 12. all but the two middle have the white shot on the immer web. Isod 1.2, 3.4 fronts. Middle and outer manufamed to the first joint. Inque small flat, position of the sair in proportion to leak.

Drawn of the national size.

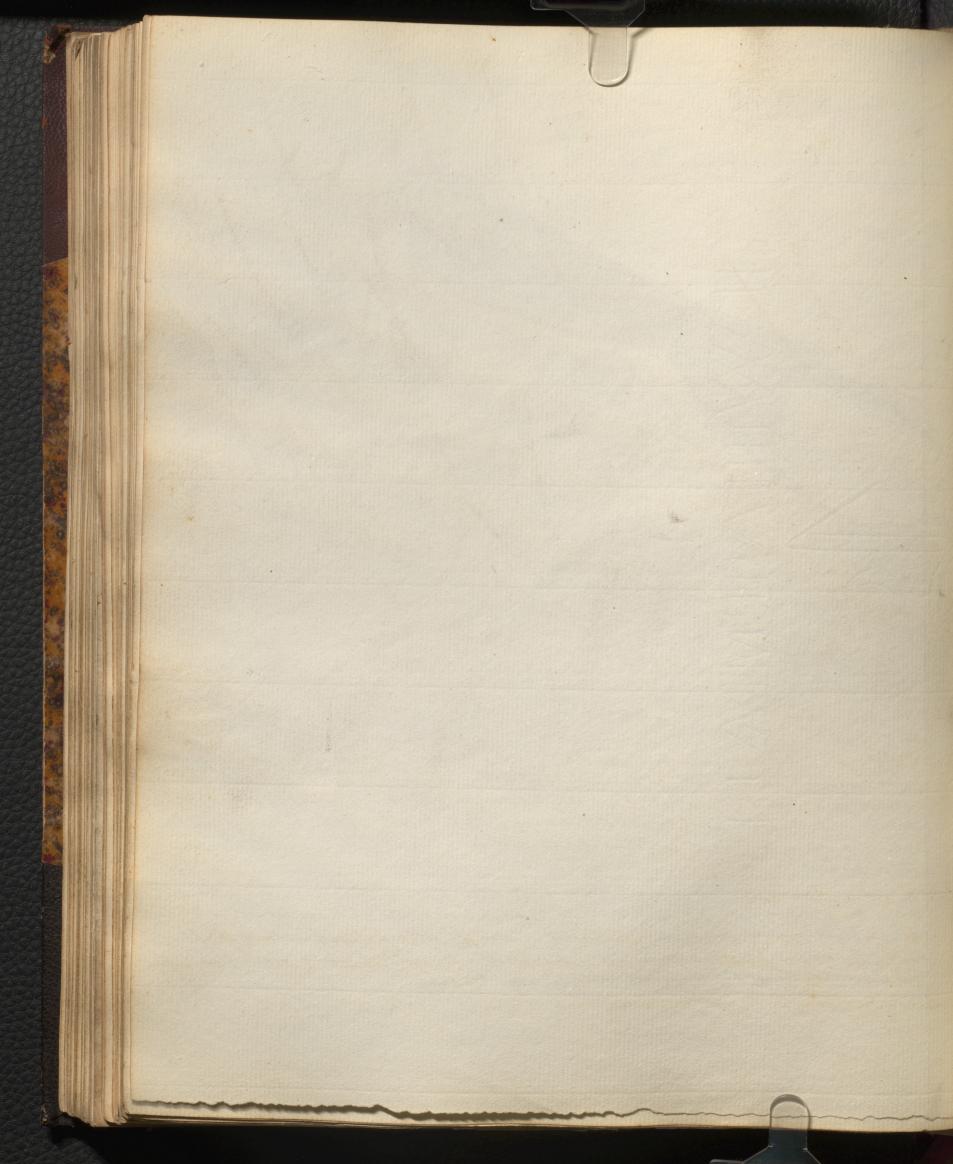
Pl. 34. t, disty wh r'ung un white of ebrane) ortin to Lig. 2. For description fu end of book.



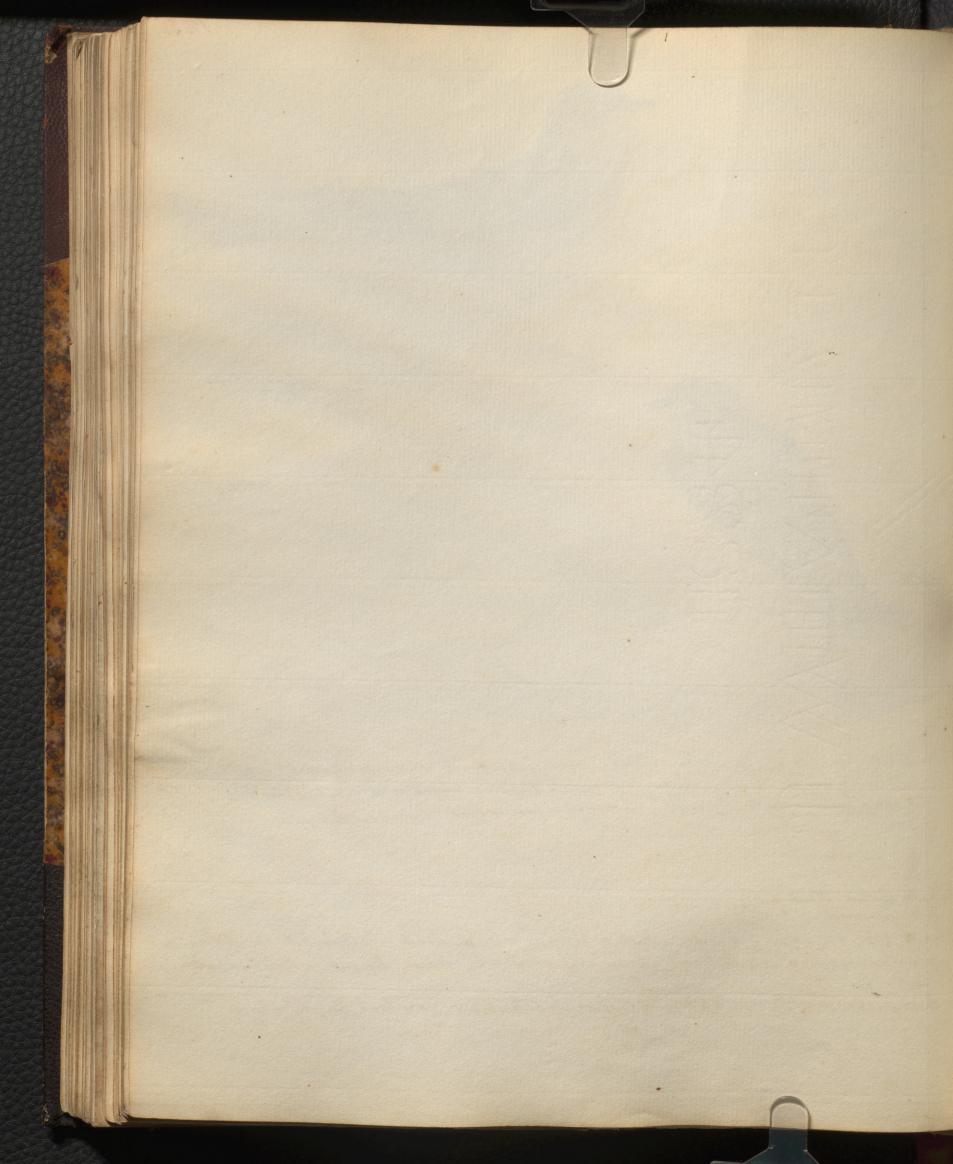








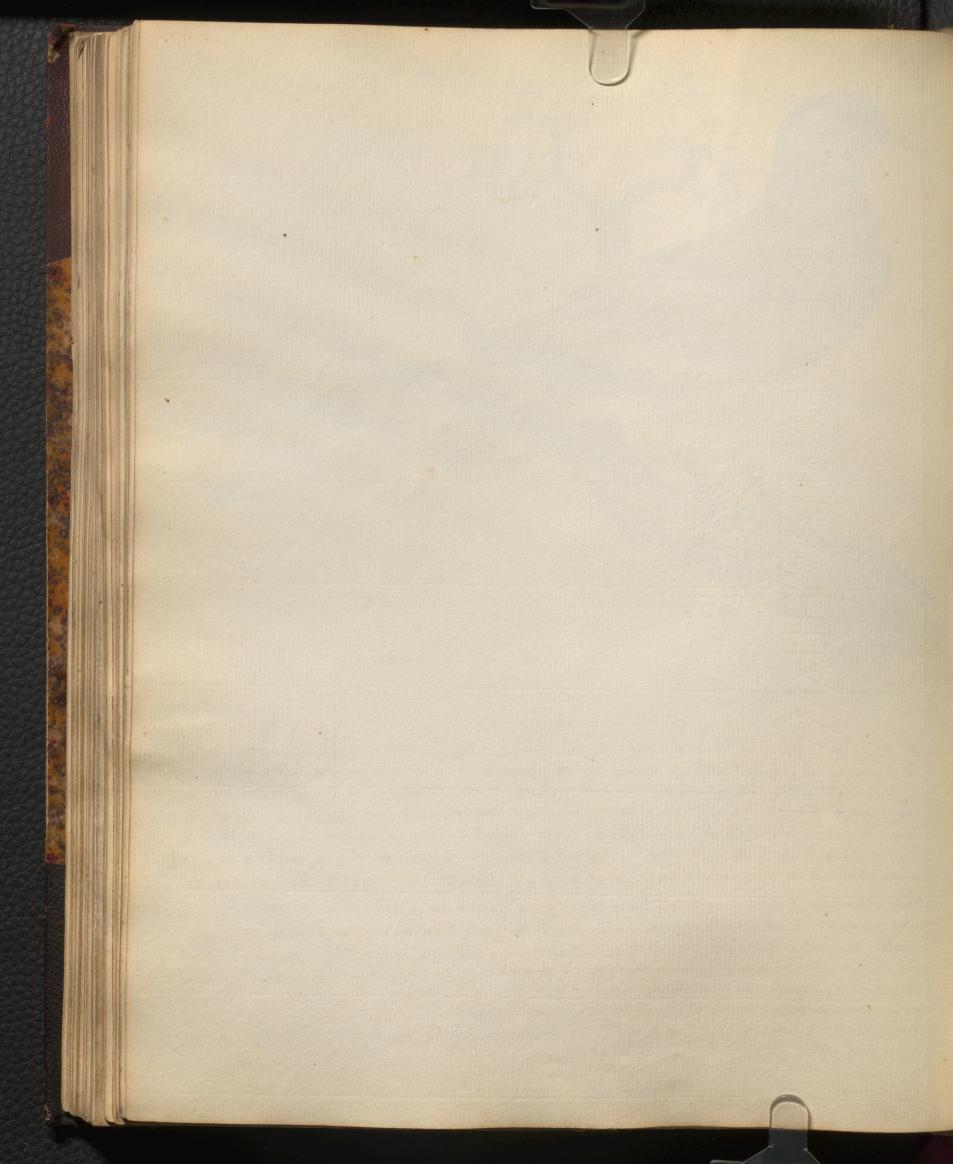


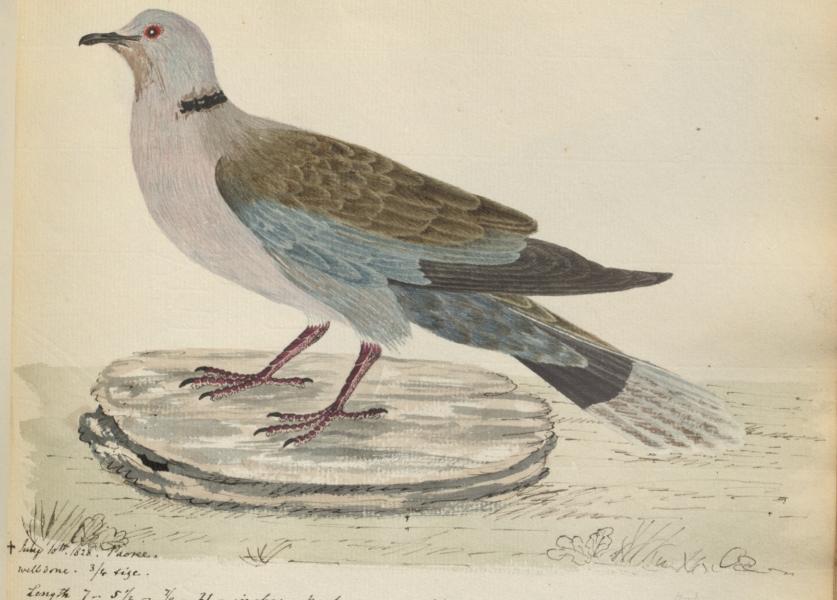




+ Aug! 13th. 1828 . Fullsiged.

Length 5/2 - 5 - 3/4 - 15 /4 - inches. Tonque . short , narrow . thin , & horny at the end . The black on the vides of neck is somed by the feathers there being grey at the roots, black in the middle k redoish brown at the our which it squareish the black af pears more than is or awar, at times; and at times is almost hidden, as the feather is moner wing coverts dull blue. dides of body under wring to, but lighter. Tail 12 -Breast light pink. Belly & vent white with aslight prinkish cream-colored tringe. under tail coverts pure white, long. Toes 1.2.3.4 joints. divided to their origine. This is a smaller & shimmer bird than those in Pl 39 & 40. Found with them in fields mear villages; and at Paonee remains all the year, which the others do not. Called , O'dialee Joogee . Near Parree it is not to common as the others . These breed at various times from middle of March to defite, so probably have more than me brood in This one was moulting when That, apparently almost done. the eng is some thing the , 100 900 900 900 900 900 900 . The Hale prople faring it days yet dyah keea to kuron

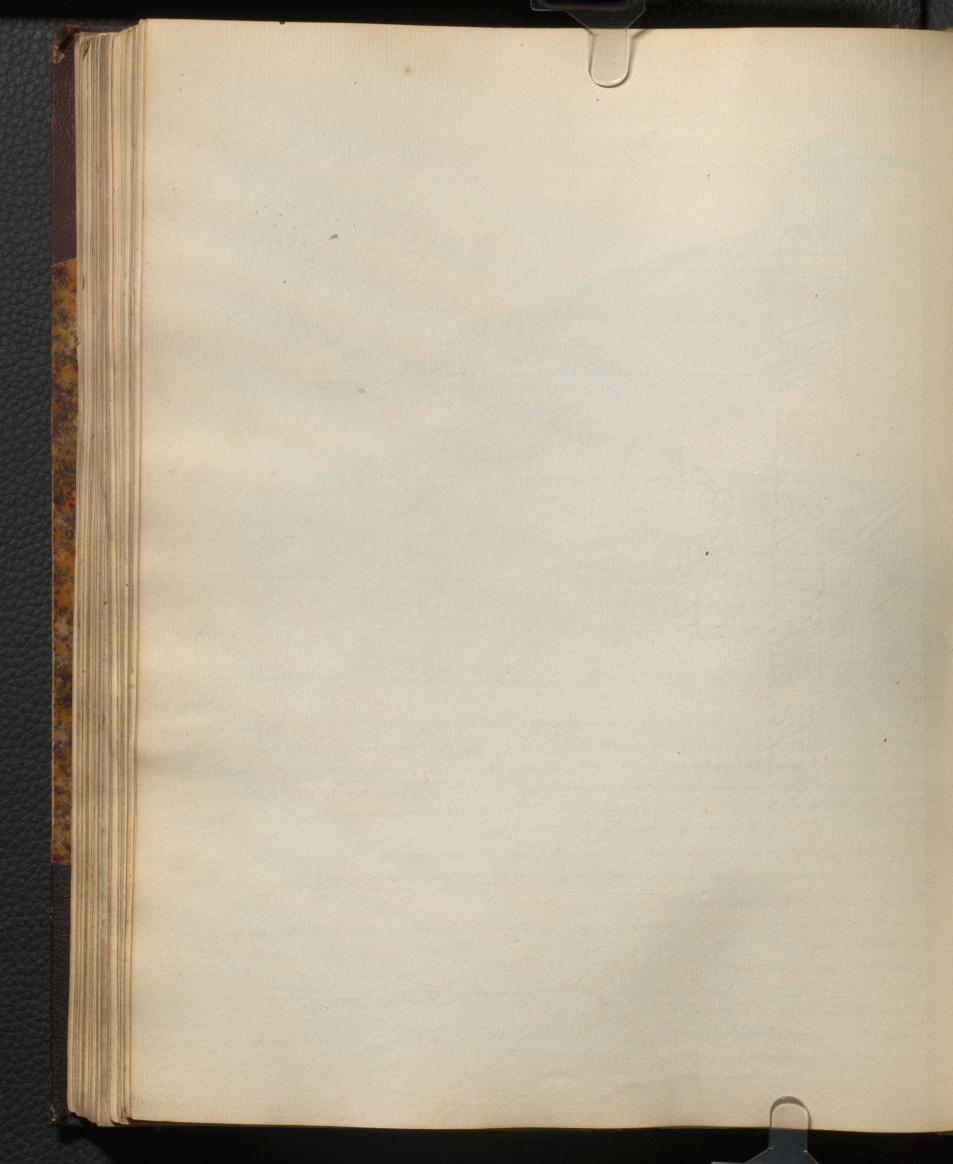




Longth 7 - 5/2 - 1/8 - 21 - inches. Back same as upper hast of wing, & tail coverts; with in some lighte a stating tinge. hides of body under the wing. like the thighs. Pail 12. minded. The 2 middle olive greenesh brown on the orbits are blackish state tolor, with a tinge of greenish brown, on the root half, dirty whose edge is blueish white. Underneath all the feathers are black on northalf. The outer feather. on one half. Toes 1. 2, 3 4 jointendivided to their origin.

This forms all over Hindostan & Jurhwall . called Pundsok or Panduk in The former. Googee or Joogootee (from its ery) in latter; where however its is only seen during the summer months. builds in these lays two white eggs nest of

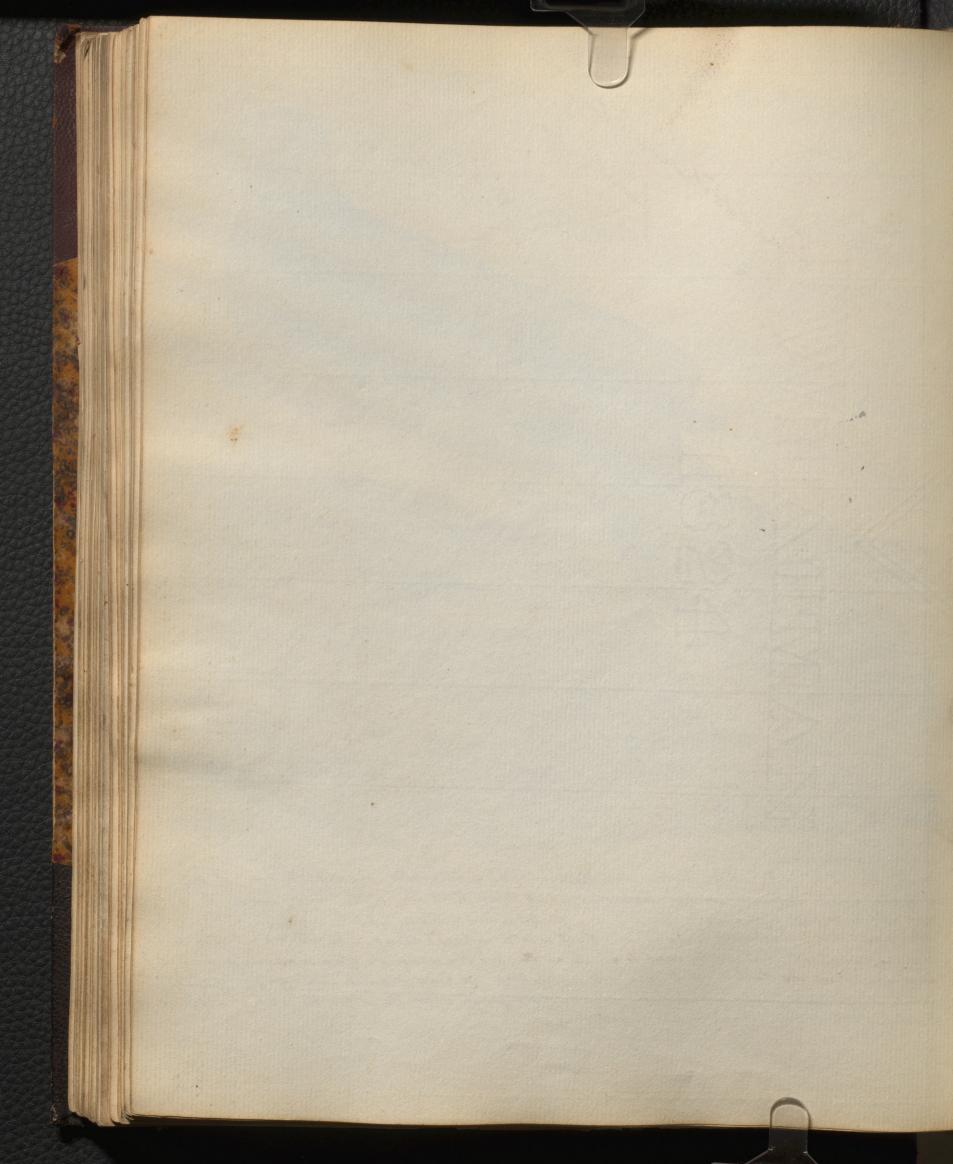
There differ much in size and color. Inobably according to age. I wespect them to be two years, if not more before they are complete. Those of I year are much duller in the colors. In different birds, blue, pink or greenish brown predominate on the head neck. breast, in some one ester, in some the other. The back too is in some more green solvies, in others more brown than in this. In some the under tail words are more of a greenish brown than blue. In some the black what is larger & sarker than in others. and the white about it is in some wanting. In some the greater quills are more brown than black, with light edging.



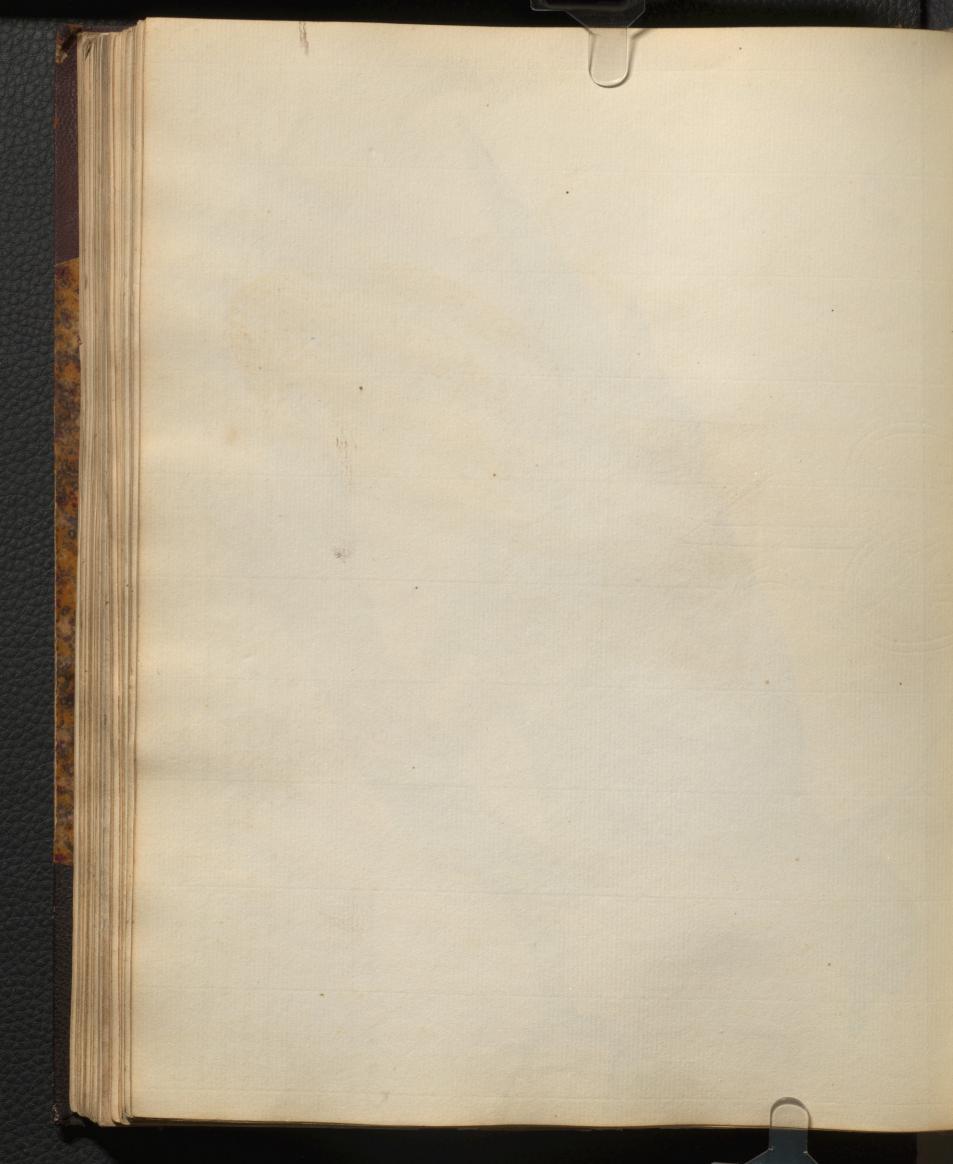
Pl. 40.



Length . 6/2 - 5 /8 - 3/4 - 17/h - inches . Bill black . Nostrils in the middle , in a slight hollow . If the inner wing wester the tradler are blue , the larger blackish blue . Vent pure white . Under tail coverts the same with the very tips light brown . Toes 1.2.3.4 joints . divided to origin . Vail 12. When young it is dull greenish brown above : with a little responsedging . No black k white on neck . This a dumpy bird . does not fly near to quick as the two preceding . often making a vort of hover spreading its tail . It its usual sitting pasture , its head is sunk into its shoulders . Your land . It is usual white grain . from the dots on the neck & and Your looke (from its ery , which is like parrow , harrow .







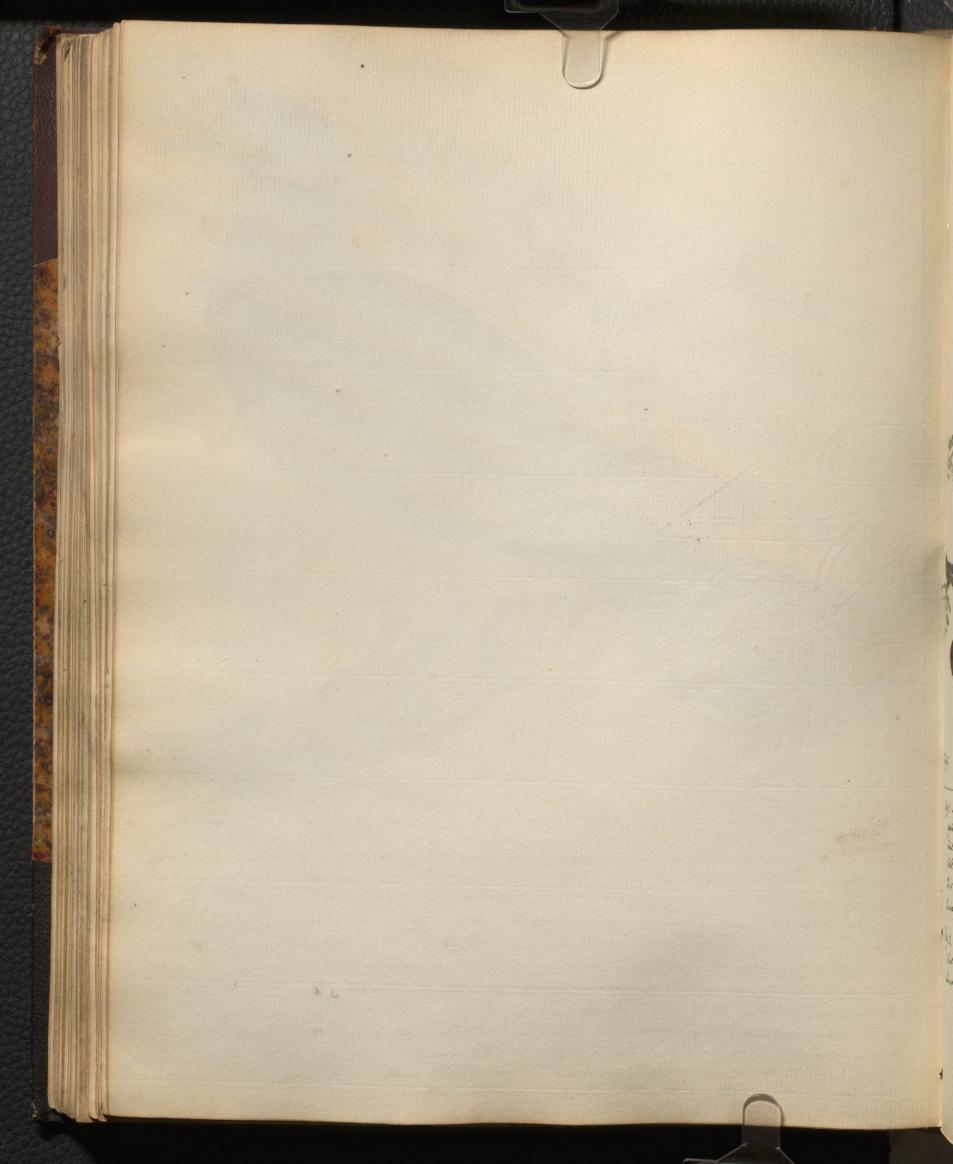


Length 7/2 5 . 1 . 21 1/8 - inches. Under wing coverts and sides of body under the wings light blueith lead color . Breast light yellowith frink, growing lighter lower sown, vent almost white, tail coverts fune white. Claws much sharper than commune in pidgeon . Jail 12 feathers.

Found in Surhwall; in summer on high wool ridges. in winter in the valleys. Talled Burn Soogee (word Dove) from its being rarely found except in forests; while those in M 39 x 40 are rarely seen away from villages. Called near Paoree Gundoula Googee.

that on in Octo 1827 on Loothunder Debee largers. as follows . Long tot 81/4 - 5/2 - 1 - 22 - miches. MB. In its ordinary position the wings hide the back.

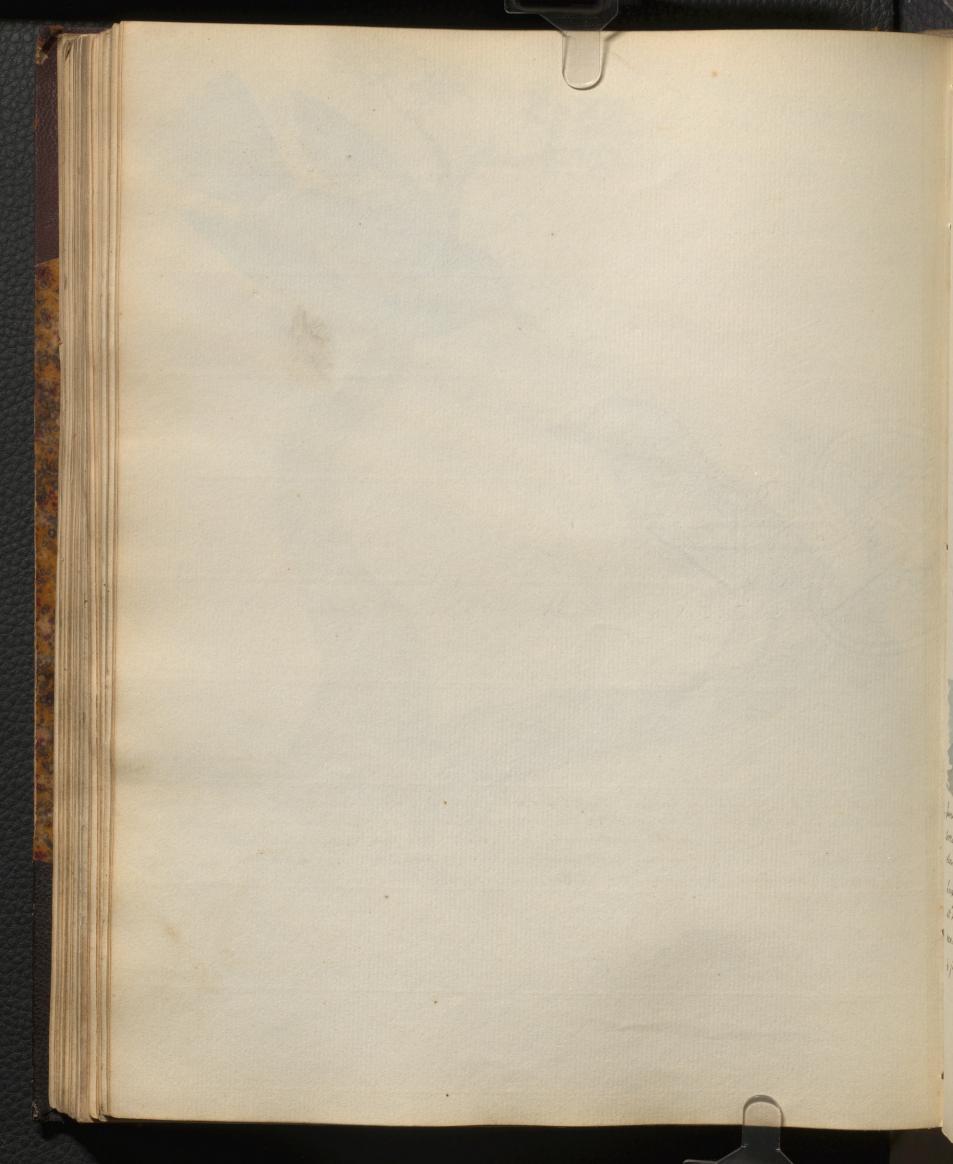
Augt 25. Shot one apparently of this year. It had no light brown edging to the feathers on the bush. the edging to those of the back & wrings, was lighter. Indes light whiteish frink. Head, neck, Throat & upper part of breast intirely brownish, greenish, asked or. Outer tail feathers blackish brown, without the blue hue. otherwise the same.



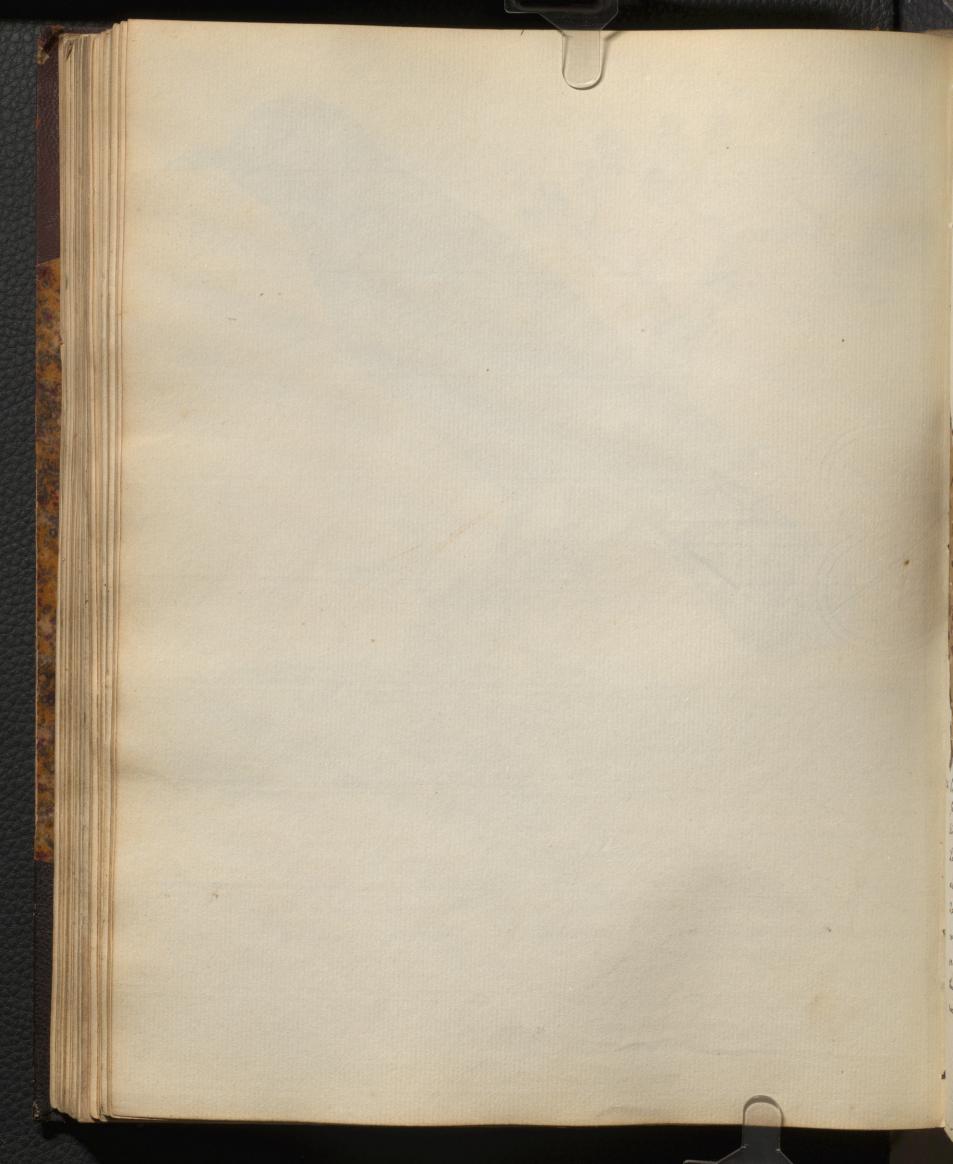


Tail 12. Toes 1.23.4 joints. Middle kouter joined to 1th joint. Belly Nark blackith state - color. Called Chetra. builds in holes in stone walls nest of most lived with hair. lays & to 5 eggs. pure white. this common in most parts of Justwall . Seen all the year . Tonque flat, thin, fleshy ; at very tip. horny & divided.

tig 2. Paoree . Sept 11 - 1828 . Full sige well done. Bugth 3/4 - 2 - inches. This is the female. winer wing coverts like breadt.





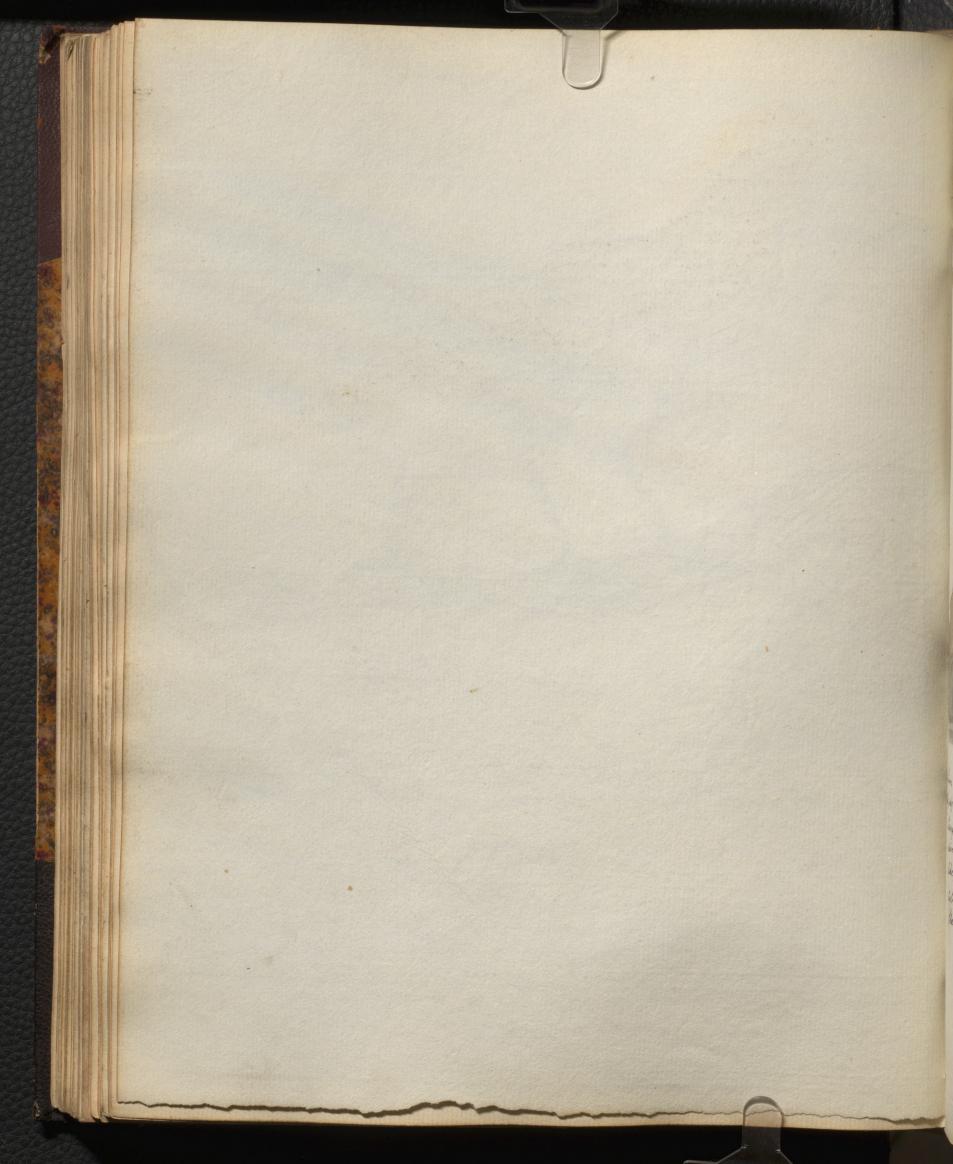


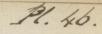


1828. June 9th correct except that the legs & Full dige . + feet are a little too dark. They should have been more of the color of the claws.

killed near Pokree.

Length 6/4 - 5 - 13/6 - 123/8 - inches. Tongue thin horny . flat , divided at the end. Immer web of quills black. To of tail black with a greenish trige. I ail 12 . Joes 1.2,3,4 joints. Middle k oriting joined to 1 joint. Wrigs small in proportion to its size. Very common in kumoun. Male k semile vaid to be alike except that the seathers at the back of the head of the male are a little clongated. if so this must be the semale. Found in shaly ravines; huilds in hollows in the sides of ravines nest of small sticks & fine grafs. Lays four eggs sky-blue.



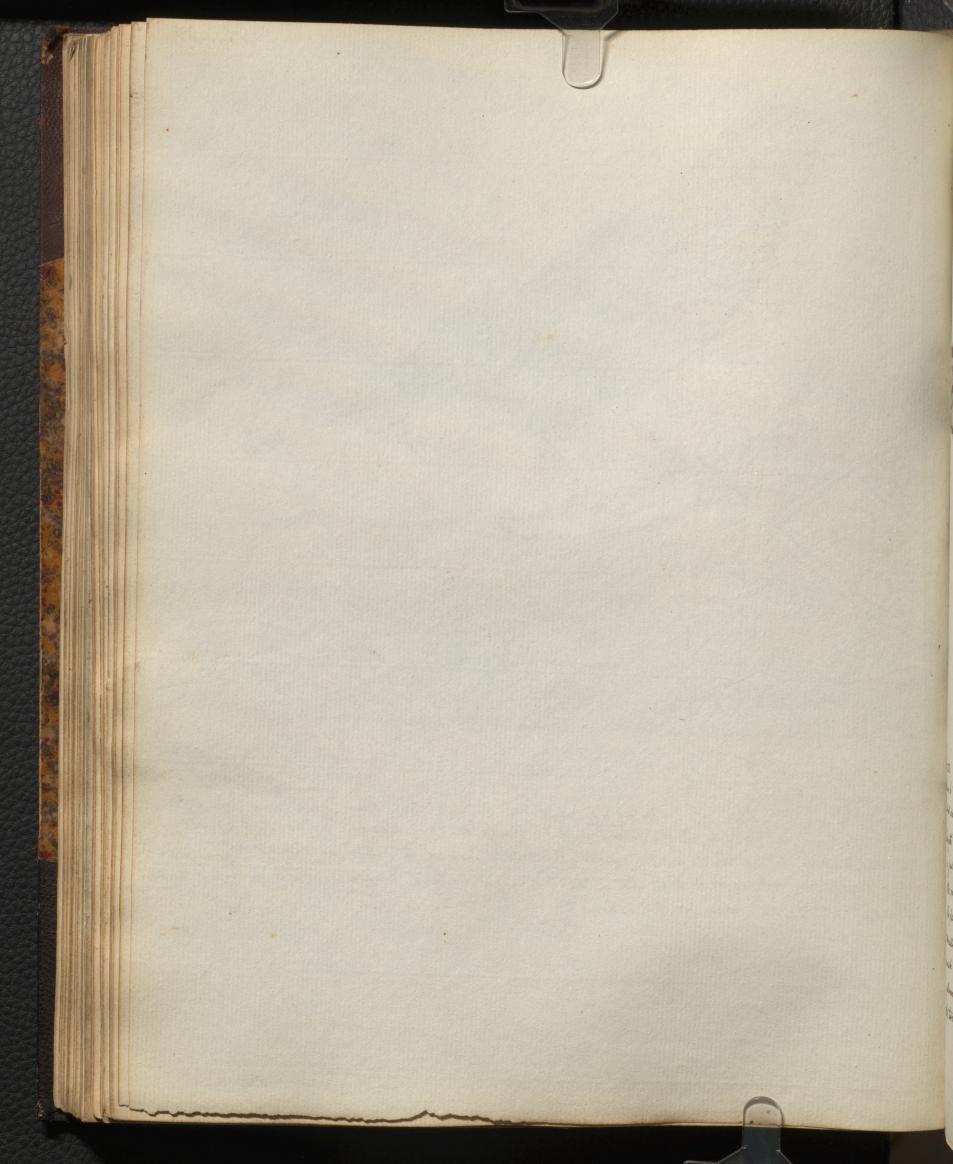




828. June 5th. Very correct.

Length 6% - 4% - Bill 1/6 - Broad 18 - inches. Tongue flat, thin, not very broad, divided at the end, & has the hooked joint. Tail 12 - rounded. Upper tail coverts like the under. Toes 1, 2, 3, 4 joints. Middle joined to outer as far as 1. joint. Called fautee, builds in branches; nest of moss. lays 4 eggs. white ground, with blackish speckles. Seen all the year.

Very like the Persimon thrush - U 5 - 19 3





+ Sune 6 #. full size. very correct killed at Pakree (Nagpoor.

Length 6. 3 - 1 - 15/8 - 13/8 - inches. The whole back is greenish, brownish, black, with a just perceptible yellow tinge & light brown shaft. The breast feathers are blueish black at the root (which does not appear) then light brown, with black ends.

The people assure me that this is the semale of the preceding one. It is considerably smaller. Toes 1.2.3.4 joints. middle joined to actor, nearly up the fish joint. Tongue much the same, but a little narrower & thinner. The inside of mouth and nostril is yellowish hom color. Jail 12. Slightly rounded. The two outer feathers being much shorter than the two seconds. The eye has a nictitating membrane from sorewards.

Fig 1. The Med Peakock. Mohur by Natives.

Length 26/2 (pressing down the top-knot) 20/2 inch. i.e the real tail which contains to feathers very cureiform. The outer webs like the wing corests. The winer blackish brown. What is commonly called the tail is properly the corests, and in this, was 38/2 inches long. I have seen them 5/eet, i.e the main body of them, there of them even b feet. Bill 2/2 inch. Broad 53 miches. This joint b inches. Spur 3/4 inch. Sides of the body blackish brown. Top knot 2/2 mich long. Outer quills reddish brown; middle ones fine black. inner like the wing coverts.

1148 ail which resti.the by the leet, in Broad blackish iddle m

Length 5/2 - 3 - Bill of - Broad 18 1/8 — inches. Drawn of the natural vige. The vieldes are a greenish glassy white negs in color. Ill the body feathers, har ticularly those of the head, are of a soft relectly texture. Tongue soft fleshy.

This shape and has the hooked joint. Luills have agreat deal of blackith brown on the inner web. The under side of wing has more light brownish cream color about it. The inner wing coverts ragged, more like hair than feathers.

Vent light brownish cream color. Under tail coverts white, dashed with light. blackish brown. Back, rump k upper tail coverts, like the breast but darker. Jail 10. Upper side like the under, but darker. Joes back has I, outer knimer each h. middle 3 joints. The outer can be turned backwards. At each joint is a fleshy projection underneath giving a scide view of the toe like this 1500 Joes scaly. claws not much hooked but sharp. From the tinderness of the toes, it appeared not a very old bird, although full grown. Lags feathered to the toes.

Light Soft Jo - 1/4 - Bill 6 3/8 - Broad 65 - inches. Sorpendicular height, Standing as drawon 35 miches. Billy, a breast white; with a slight dash of cream color. Between the thighs and on the vent are some dashes of blacketh. Under taic. worth here while. At the top of the thigh joint on the outer side is a small pattle of black. Quills dash blackish slate color, all but hidden by the coverts when the wing is closed. Under side of wing light slate color. Eyelist yellowish green. wides bright yellow. Outer and middle too webber together to the 1th formt. Middle too 33/4 micks exclus of claw. Claws broked and patter sharp. Tongue. It will work exclus of claw. Claws broked and the point, soll Fleshy. It flies in an awhward heavy way, carrying its head and white.

Fig 2.

Length 19/8 - 3/8 - Bill 3/8 - Broad 36/4 - inches . Pert height as drawn 19/8 inch. Plumage entirely pure white . Eye & lids as Fig 1 . Tongue 1/4 inch long flat, thin, fleshy & pointed . Hies like Fig 1 . Northils correct with a membrane , which at first right makes it appear as if it had none .

Pl. 50 Fig 2 Jany 14. 1828. Fig 1. Jany 1/2 Longth 9/2 - 23/4 - Bill 2/2 . Broad 19/4. Tongue thin, fleshy at root, hony at end . Sharp, a some what gauge shafed . 2/3 the length of bill. Colors correct . on the back are some streaks and dashes of lighter brown. Qualter light blackish slate color with a tinge of brown. Greater coverts the same but fringed with white. Under side of both, the same color but lighter. & no white fringe. Lefser inner wing coverts like the thigh a feathers behind. Tail 18 wereiform. The four centre broad. black for 2/3 or of length ends reddish brown. Others blackish brown, part light, part dark, and narrow. Back toe I winer 2. middle 3 outer 4 foints. The upper mandible 18 with longer than lower and has a sort of knot turning townwards. e.g.

Per height as drawn 85/8 wiches. Drawn half the natural lige.



hill. slander, sharp & slightly divided at and. Nostrils penious. Under mandible compressed at the edges. Inner wing coverts white speckled with light gray. Rump & upper coverts & tail white must the very ands of latter which are speckled slightly. Shaft of outer quill while; of the other Hack. middle kouter toes webbed together to the first joint. Some in Historian. This killes at Paoree Seft. 1827.

on the unner with near the centre of the feathers.

Fig 1 .. Lingth 6% - 3 - Bill 1/4 - Broad 21 /8: The inner web of the wings have the white bars much broader vail 12 Abored like the quills inner wing coverts white with a little tinge of ash. Toes the back has 1 ... Teach 2. middle 3 joints. The saler can be turned backwards . " the natural size.



Tig 1. hingth 27/8 - 19/8 - 1/2 - 6/4 - inches. Billike awarblers. Tongue flat, this, homy, & fringed at the end. Northils in a hollow, covered with a membrane - welids carunculated, & a beautiful kilky white. Insure using covered whiteh yellow. Insure web of quills black - Societ 12. insure webs blackish. Toes 1.2.3. 4 joints. Middle joined to the insurer half way, to outer wholly up the 1" joint. Common in most pasts of further all.



Lalles by the Porthus Lat Loosum. Longth 6/8 - 2/8 - Bill 3/4 - Broad 18/2. Perpendicular height as drawn 5/2 inches. Fraun two thirds the natural sije. Tilled near thanson thoki. Colors cornect. France web of quills marked like the outer, but lighter color. Underside of quills marked the same but till lighter. Inner wing coverts white with dashes of light roddish brown & light blueish gray. Vent while under tail coverts like the thighs but the bars lighter. Toes 1, 1, 2, 1 forits respectively. The outer to e can turn backwards. Jail 12 rounded. This is altogether very well done, except the place of the eye; it should have been 1/3 of an inch pigher up . Northils situated in a vising knot on each side like 12 52 Light. Legs feathered to the toes, and even they have some straggling white hairs on them too difficult to draw. The white of the breast extends in a very narrow streak down the belly to the vent, only visible in a full front triew. hays 2 eggs. pure white. male & female alike.

Pl. 54. + Figt. Jany 23. 1828. Just 26 th 1828. Not one near Parree. It was a little farger than this. The quill were neve.

of a bounish yellow than reddith boun thised.

The white on the breast was rather left thom another, whilst more of the belly was white. If the soules fait hutters on each side, the bars of white one each web, are opposite to each other, on the two middle feathers they are not.

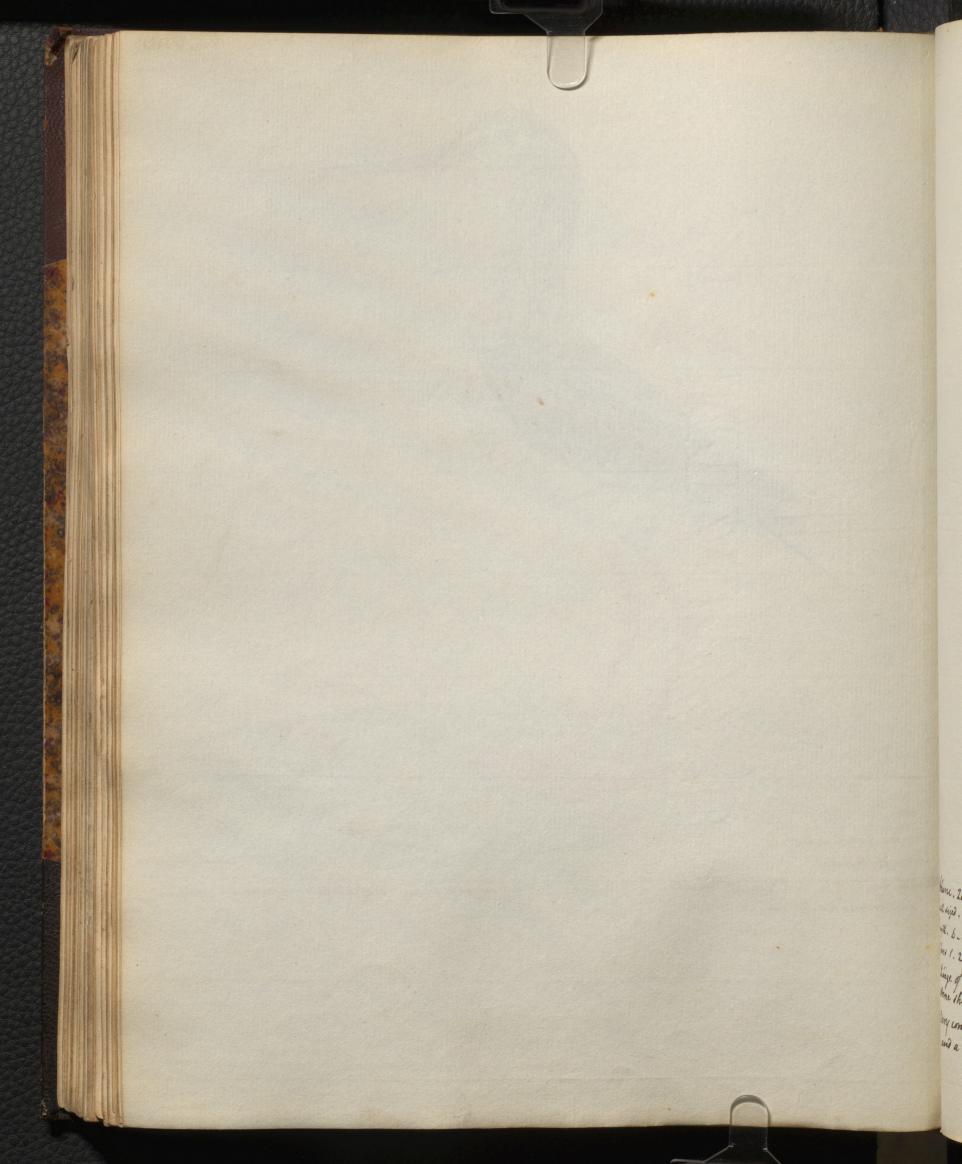
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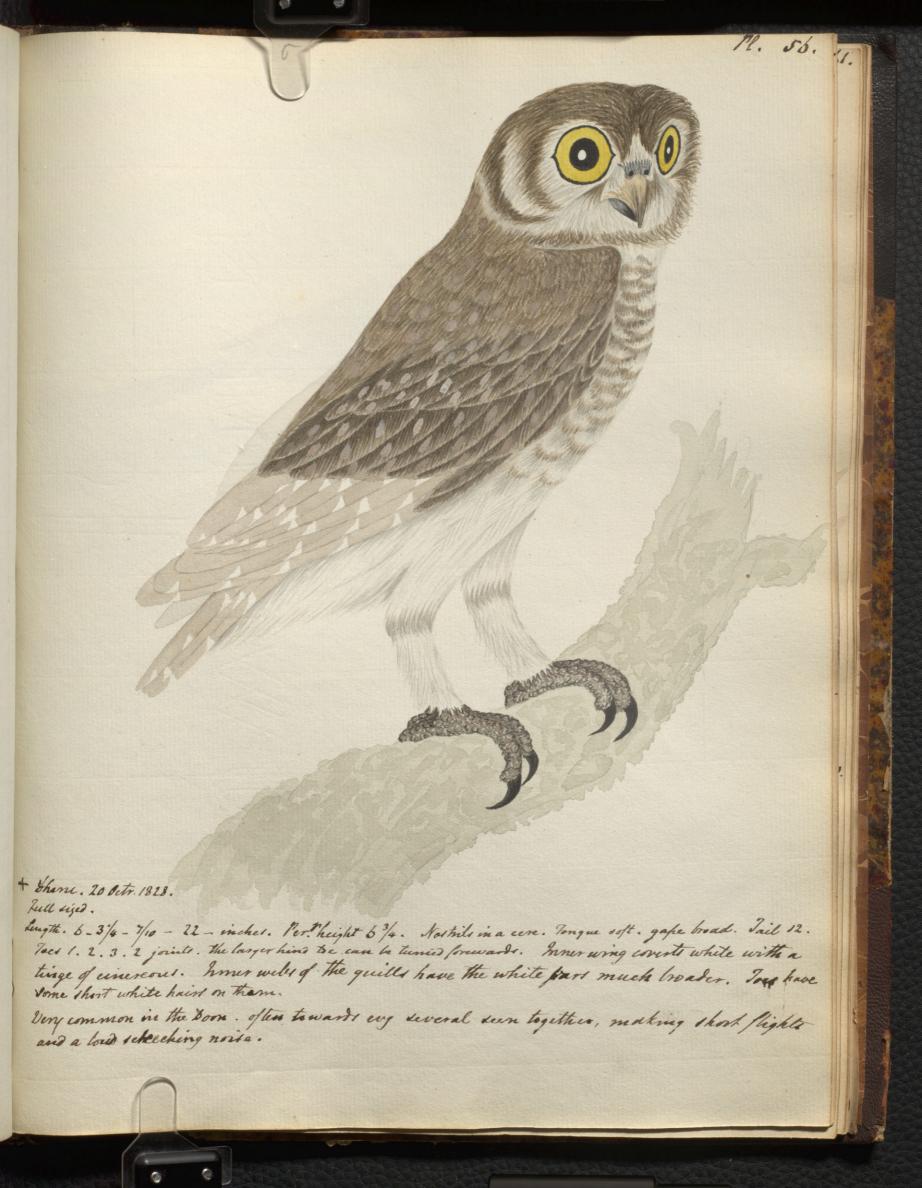
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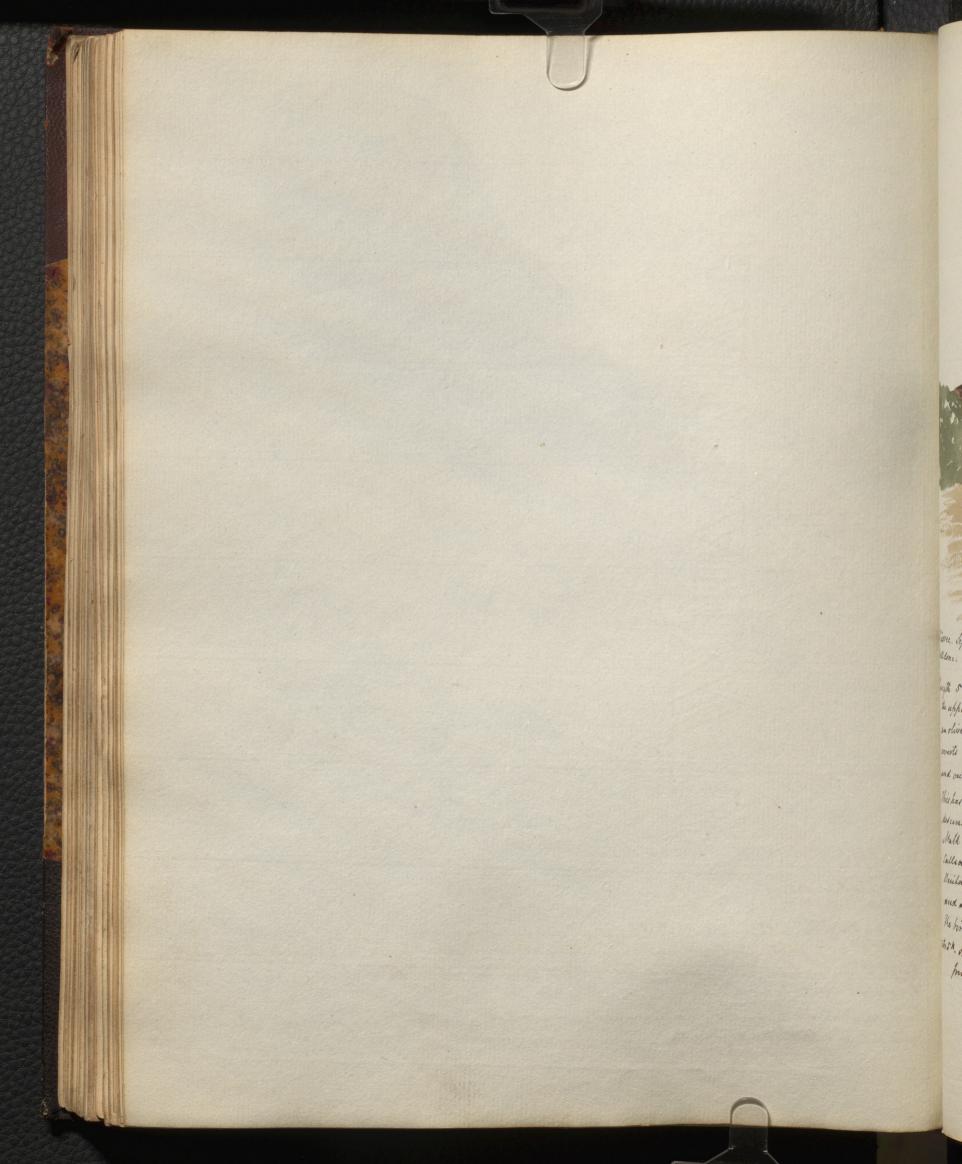
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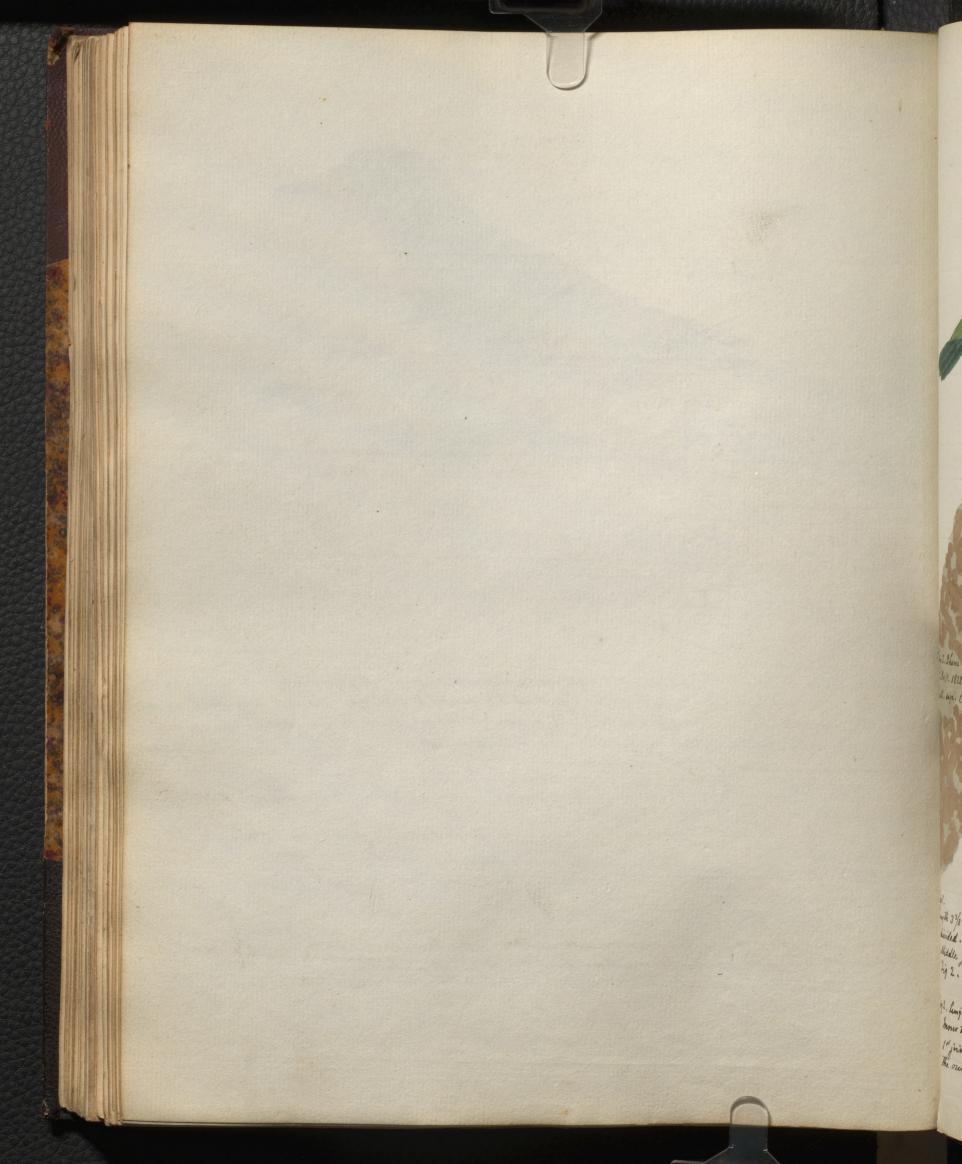




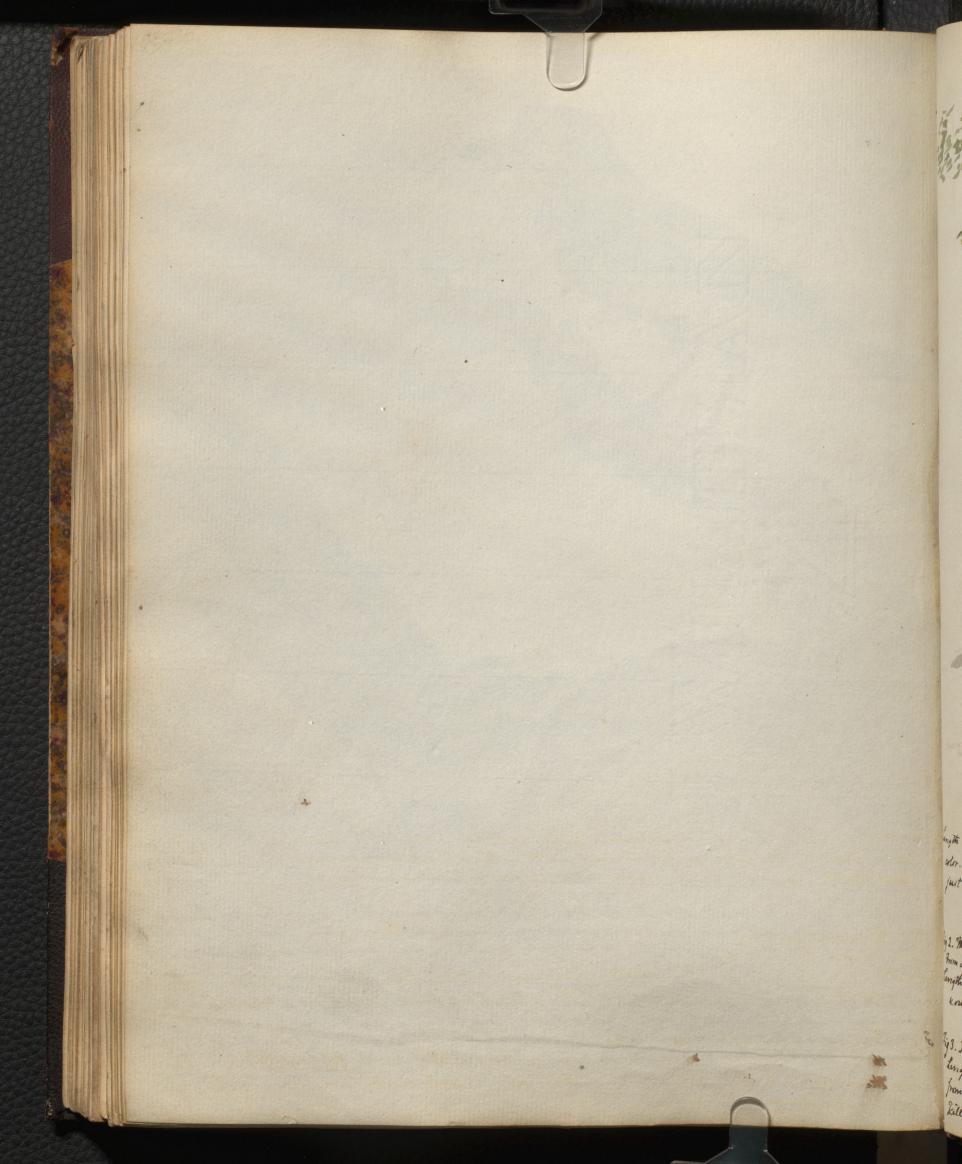




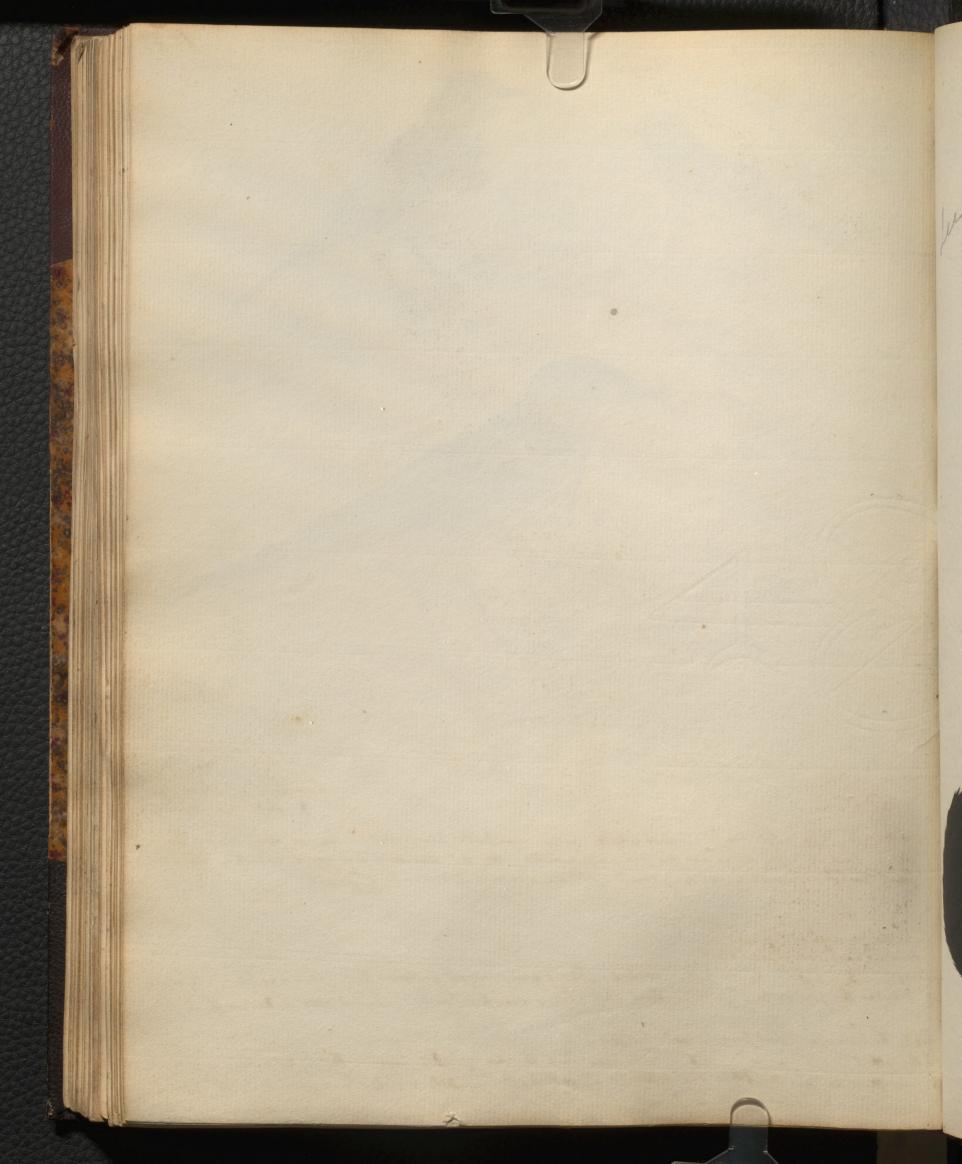




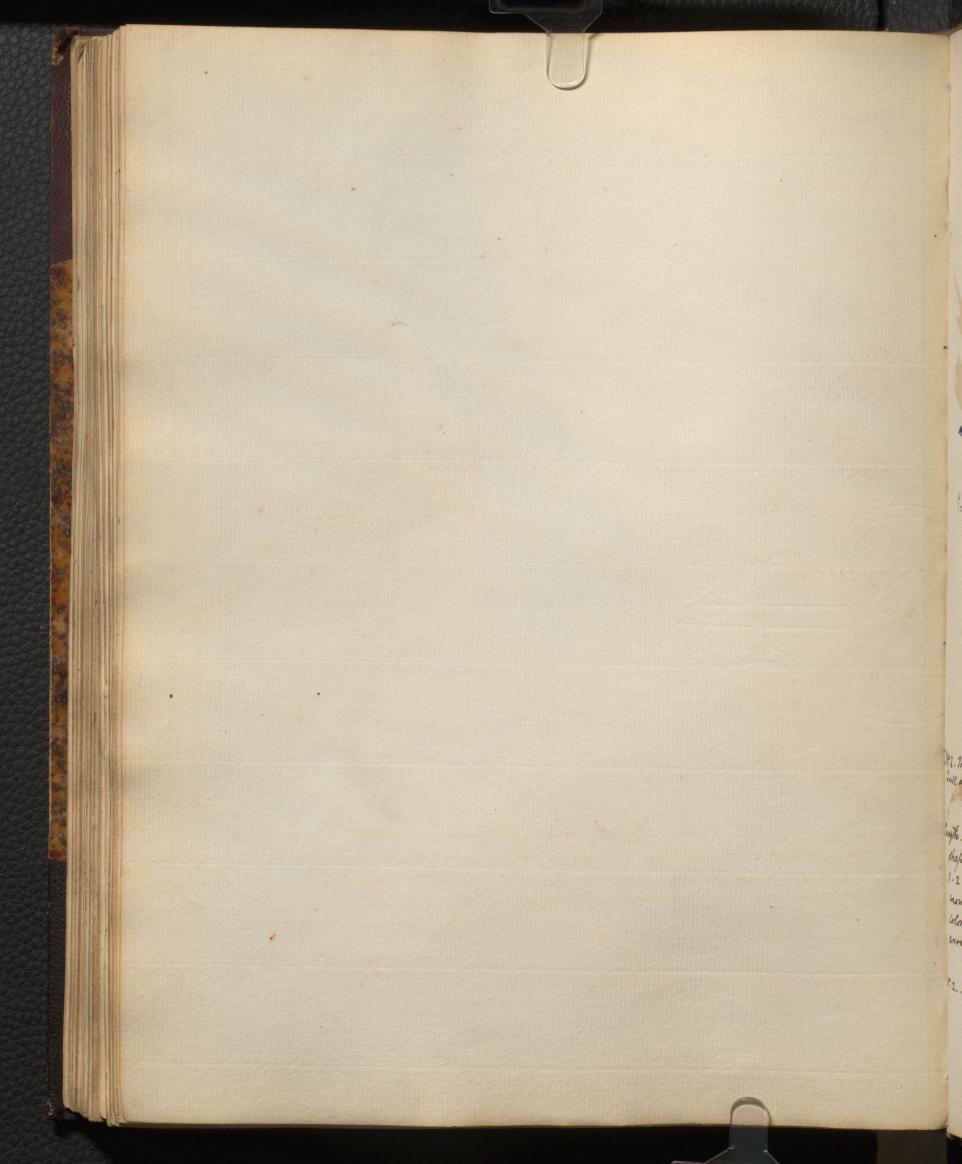




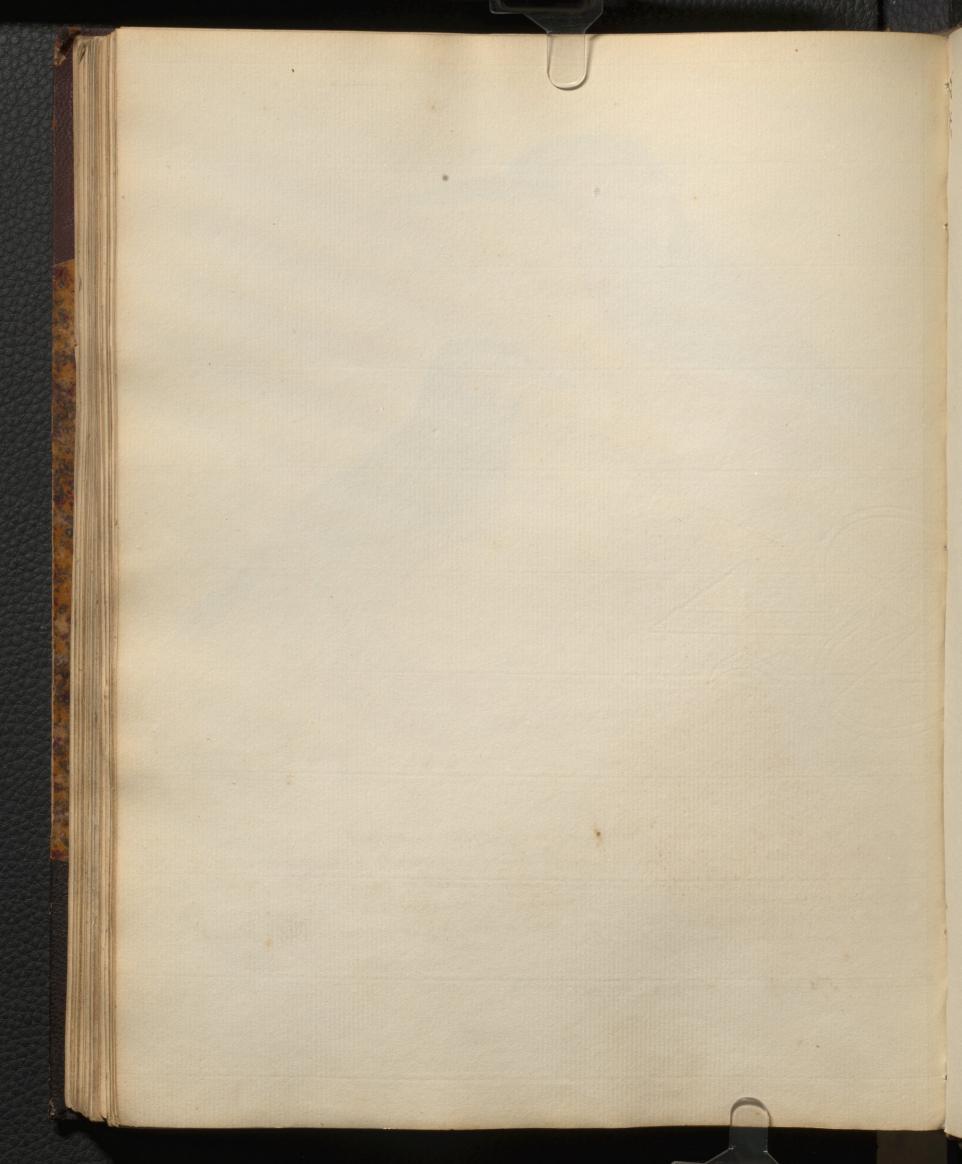




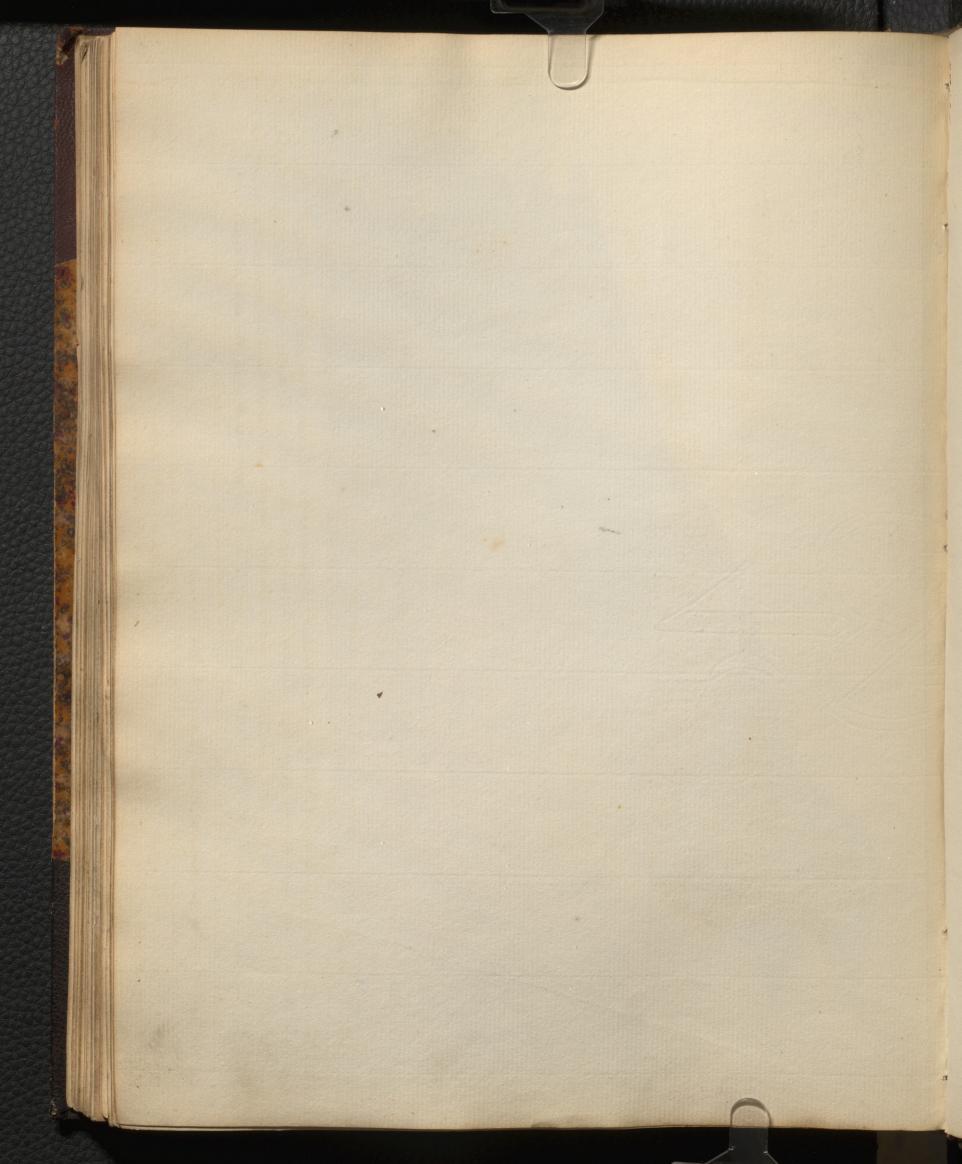


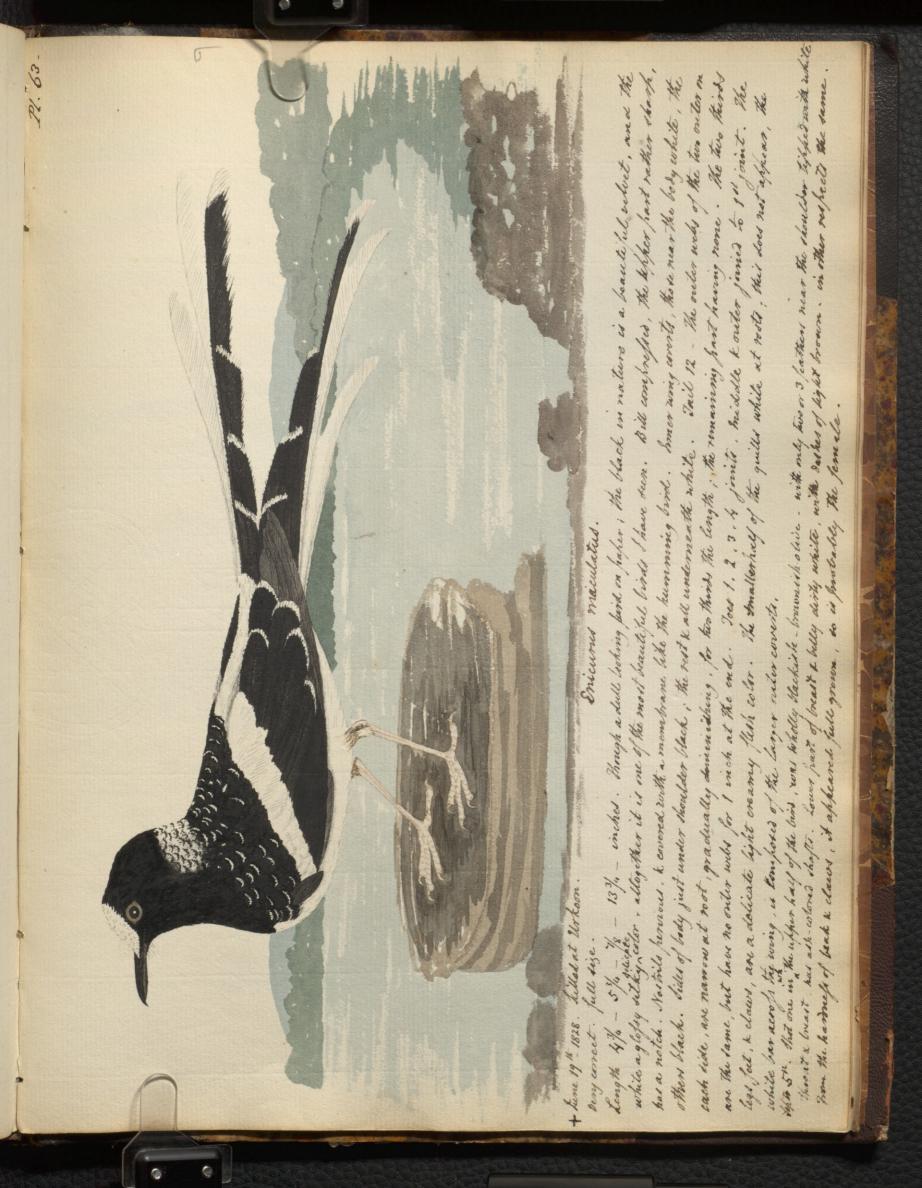


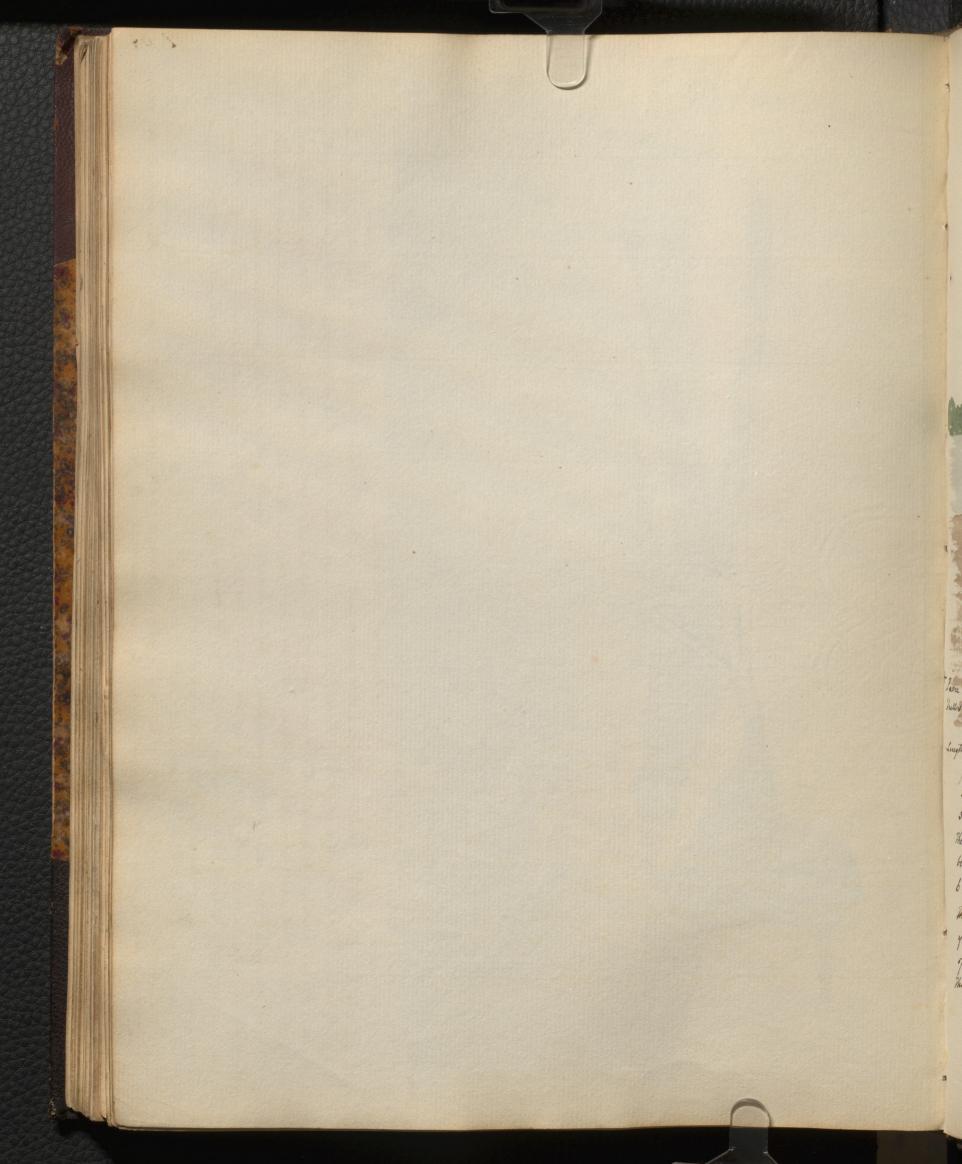




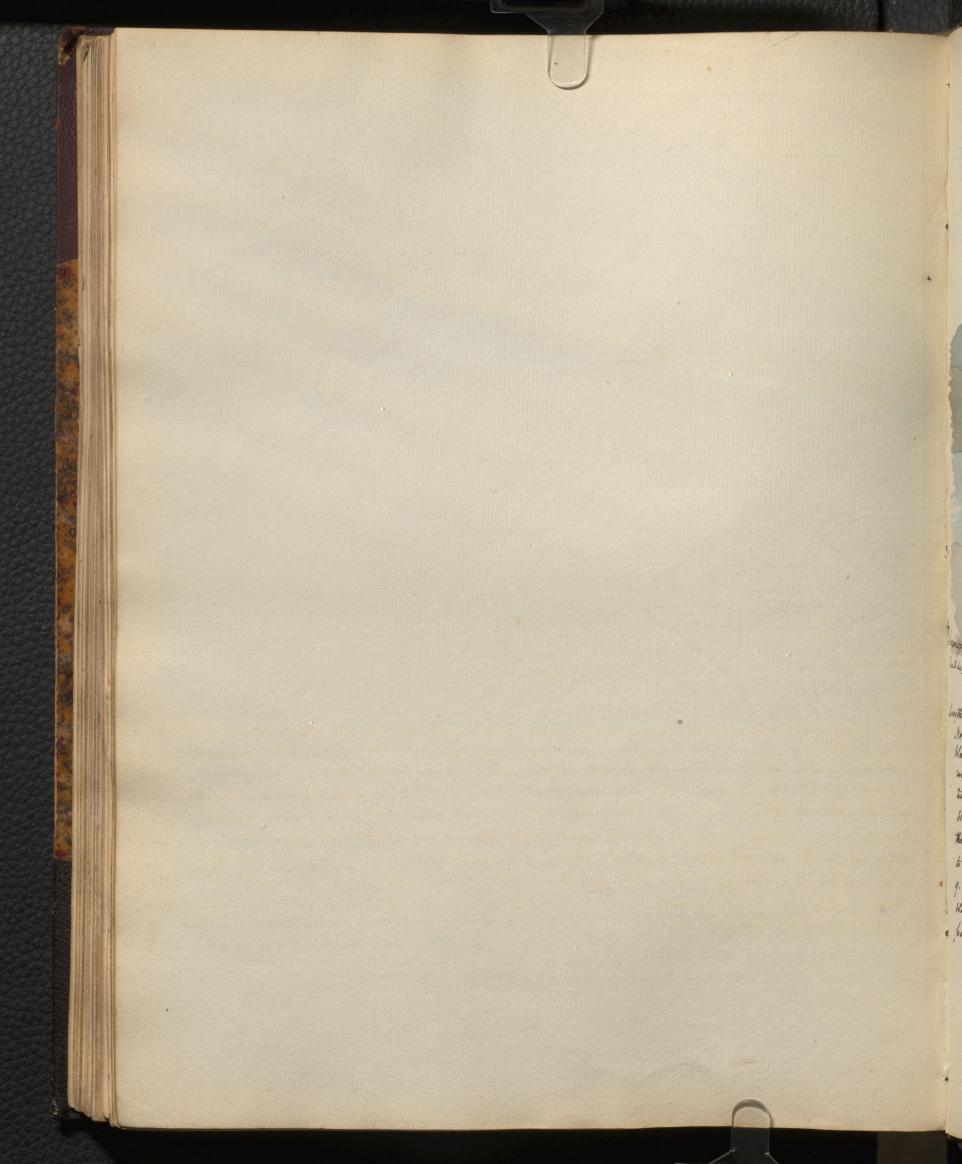


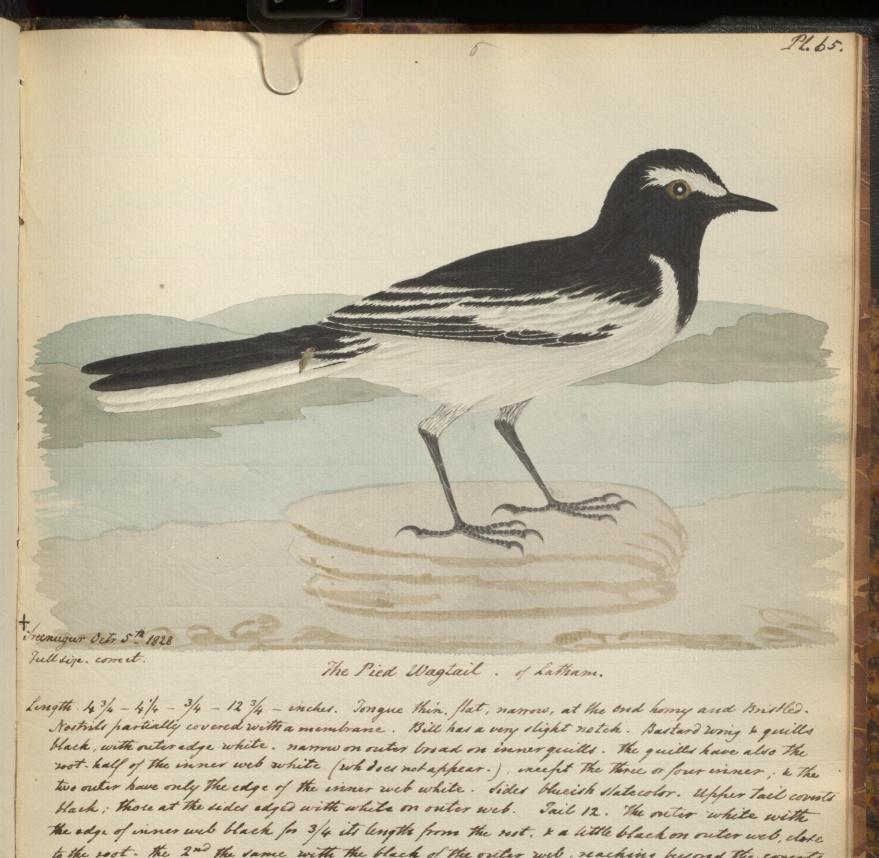




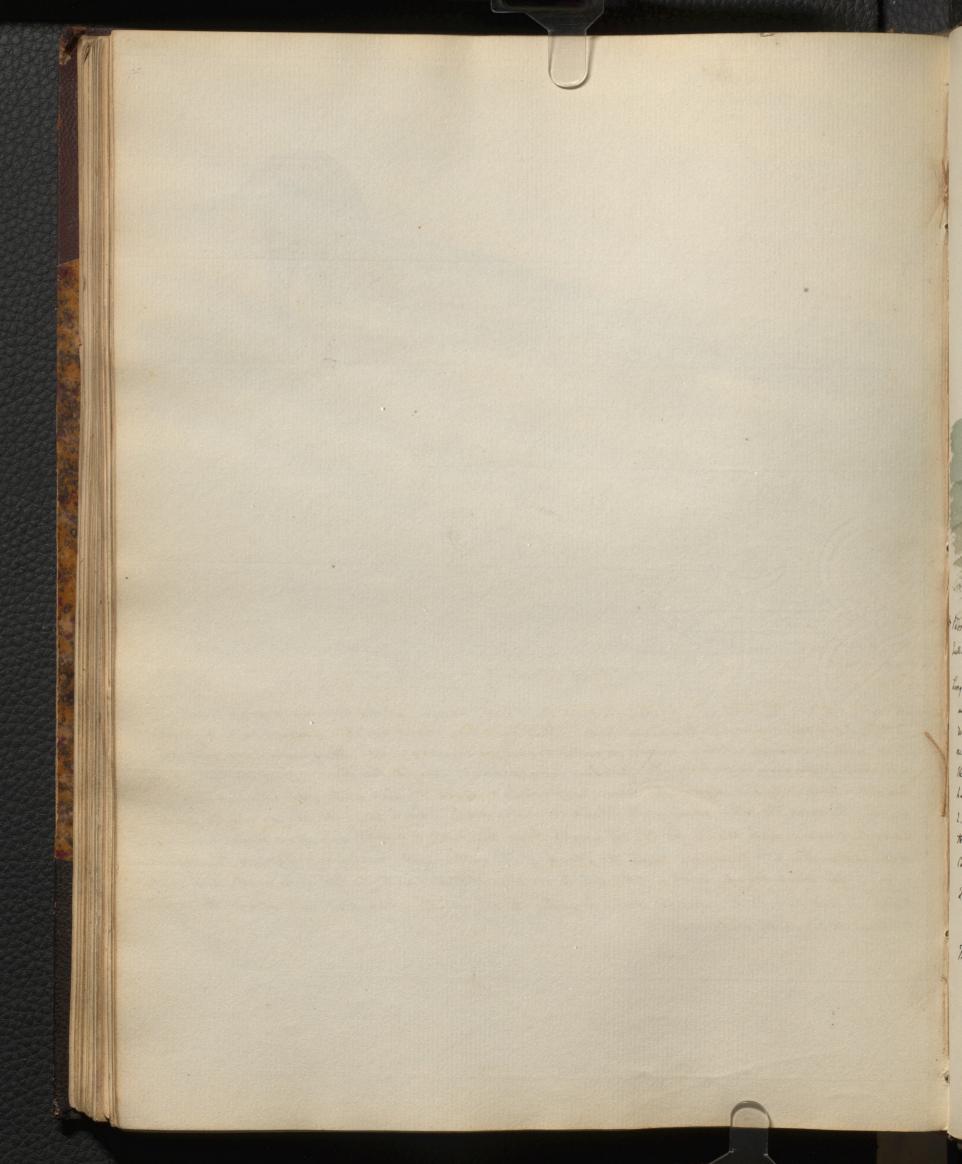








to the root. The 2nd the same with the black of the order web, reaching beyond the coverts 9. v. . the third black, with a little white in edge of outerweb for 1/3 from nort. all resh black. Tout 1.2.3. 4. Middle joined to outer to 1" joint. The root half of all the white feathers it blackith state colors.







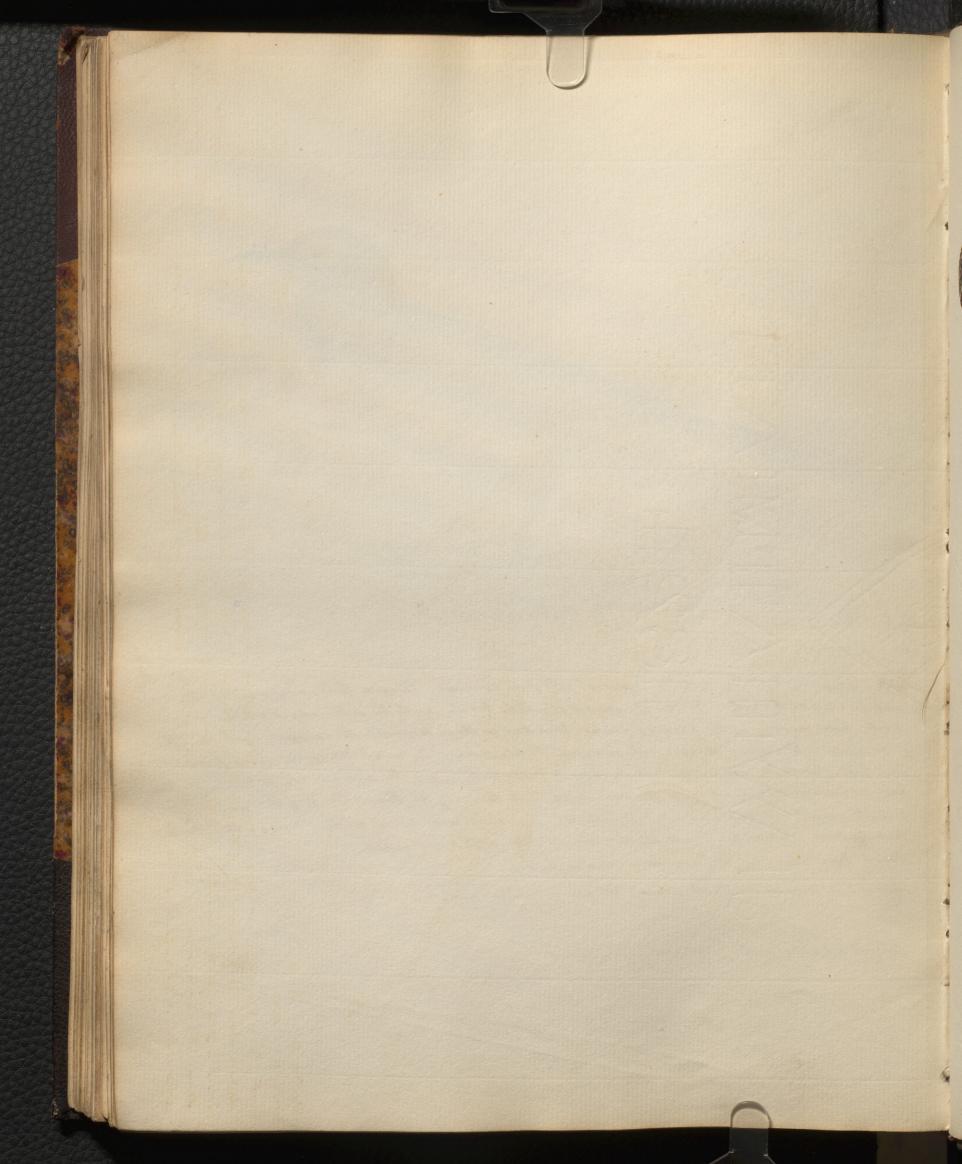
Longth. If 3/10 - 3 3/4 - 3/4 - 11/10 - inches. Nostrils pervises. Tongue thin, very marrow, horry, and divided at the end. The quills are all blackish brown, with the outer adges while, noneamy white very marrow on the greater quills, browder on thate towards the boday. Tail 12. The outer white, with a little of the edge of the views web. blackish: the next the same, with hore black these have close to the root a little black on shaft k outer web. All the rest are black, some of them have a narrow of this of white on the outer web. In this only the two 3 and to be the had. For 1.

2. 3. 4 joints. middle and outer joined to 1"jt. inner wing coverts white. result a little darker than the back. upper tail coverts black, some of them with white edges.

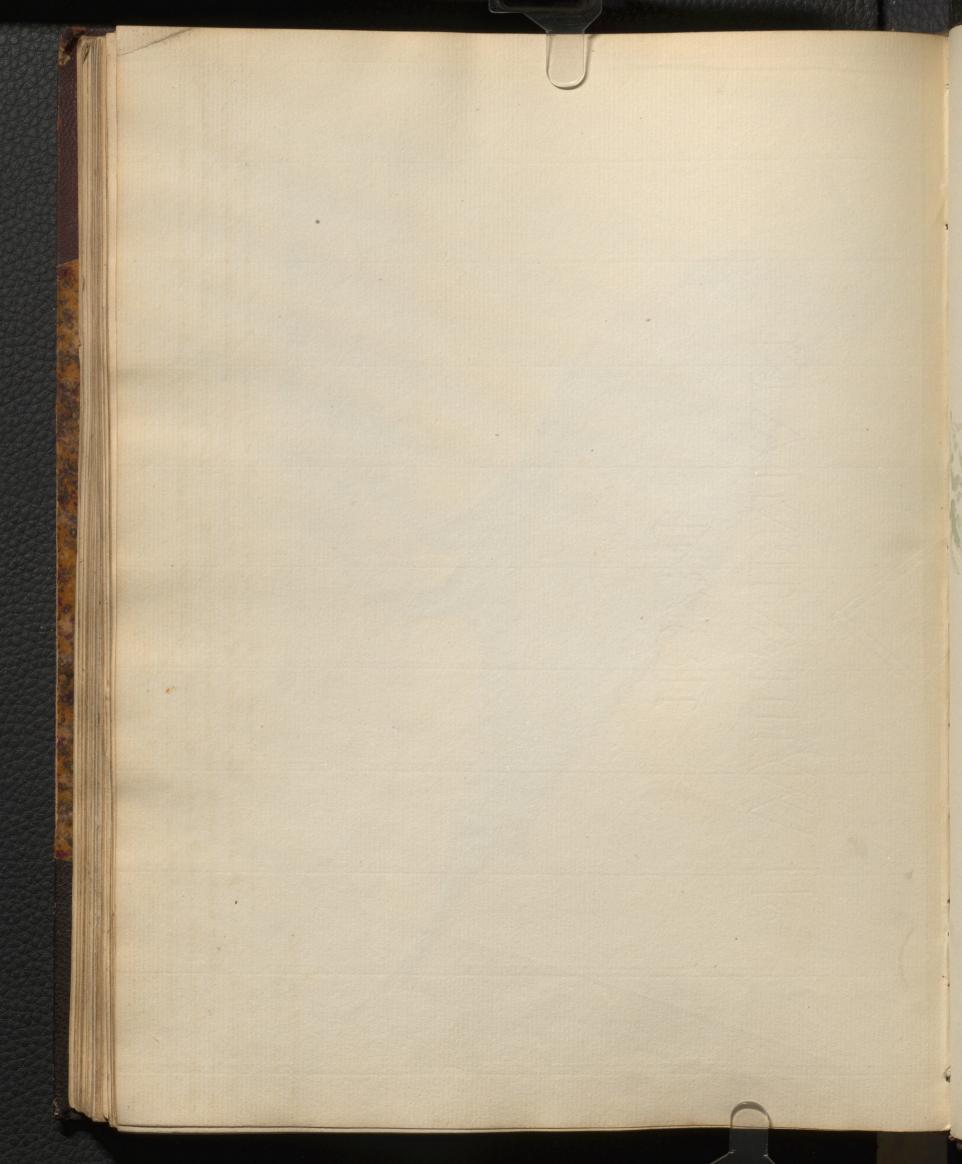
(alled Trunjum. by the Punjabees Chamehuree.

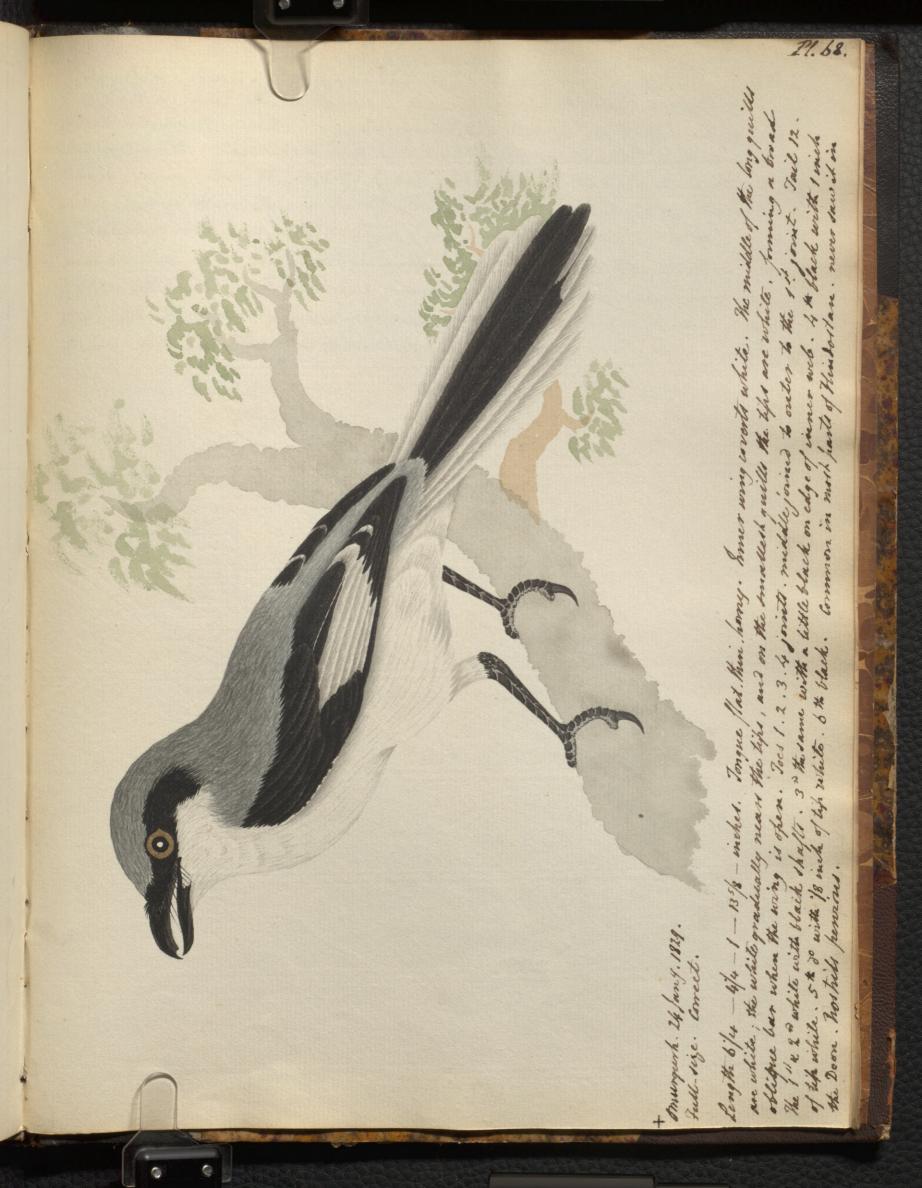
This is only seen in the flills during the six summer months.

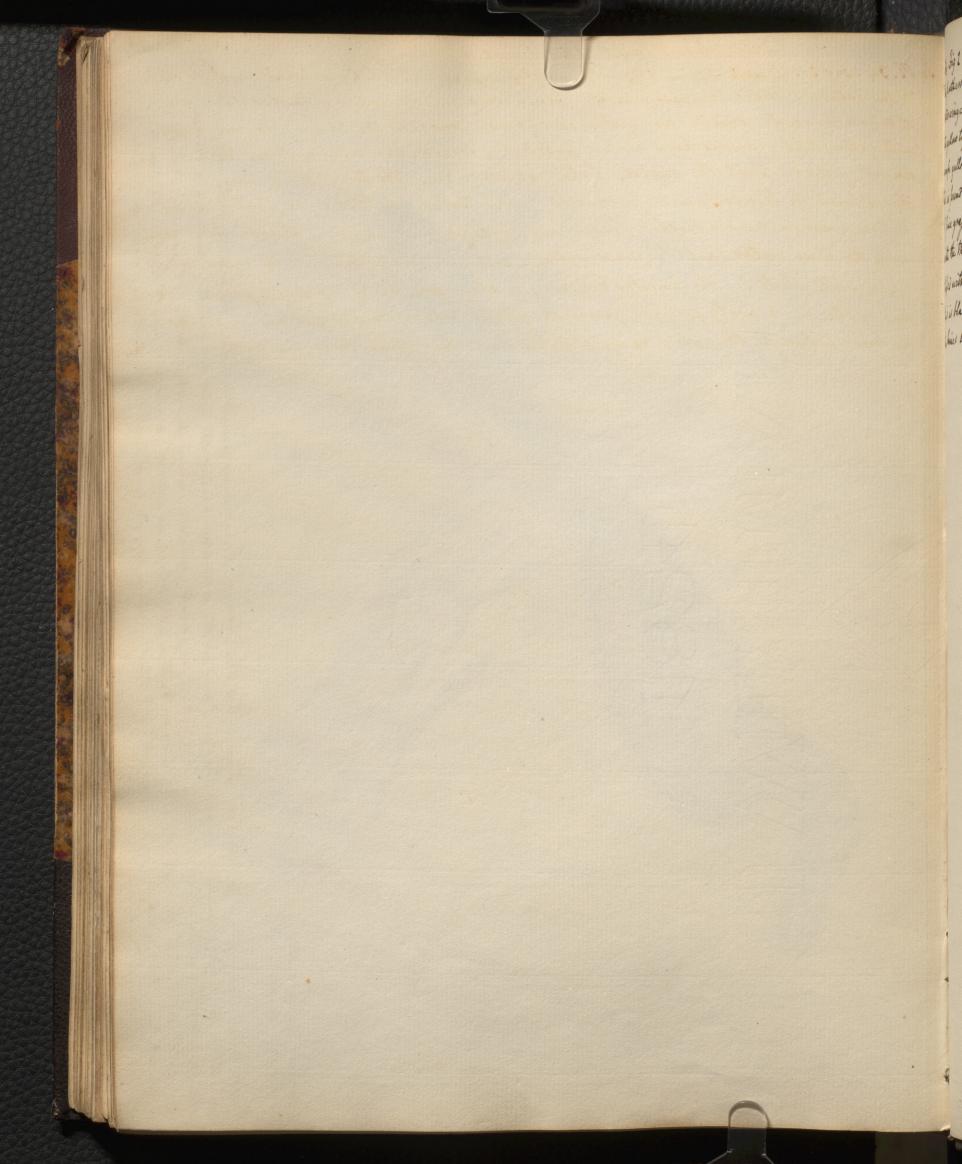
This bird had appearently just done moulting.











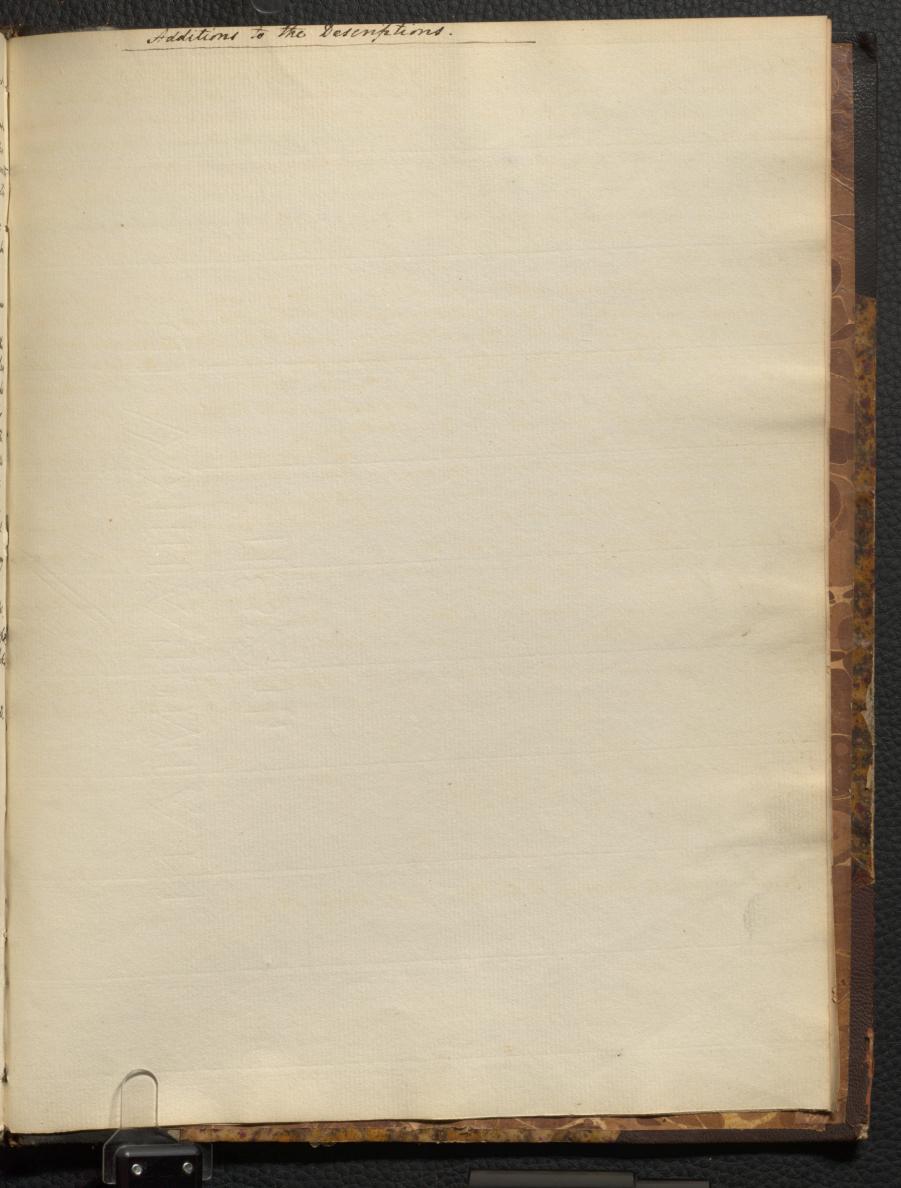
Descriptions and Additions to ... * tongue.

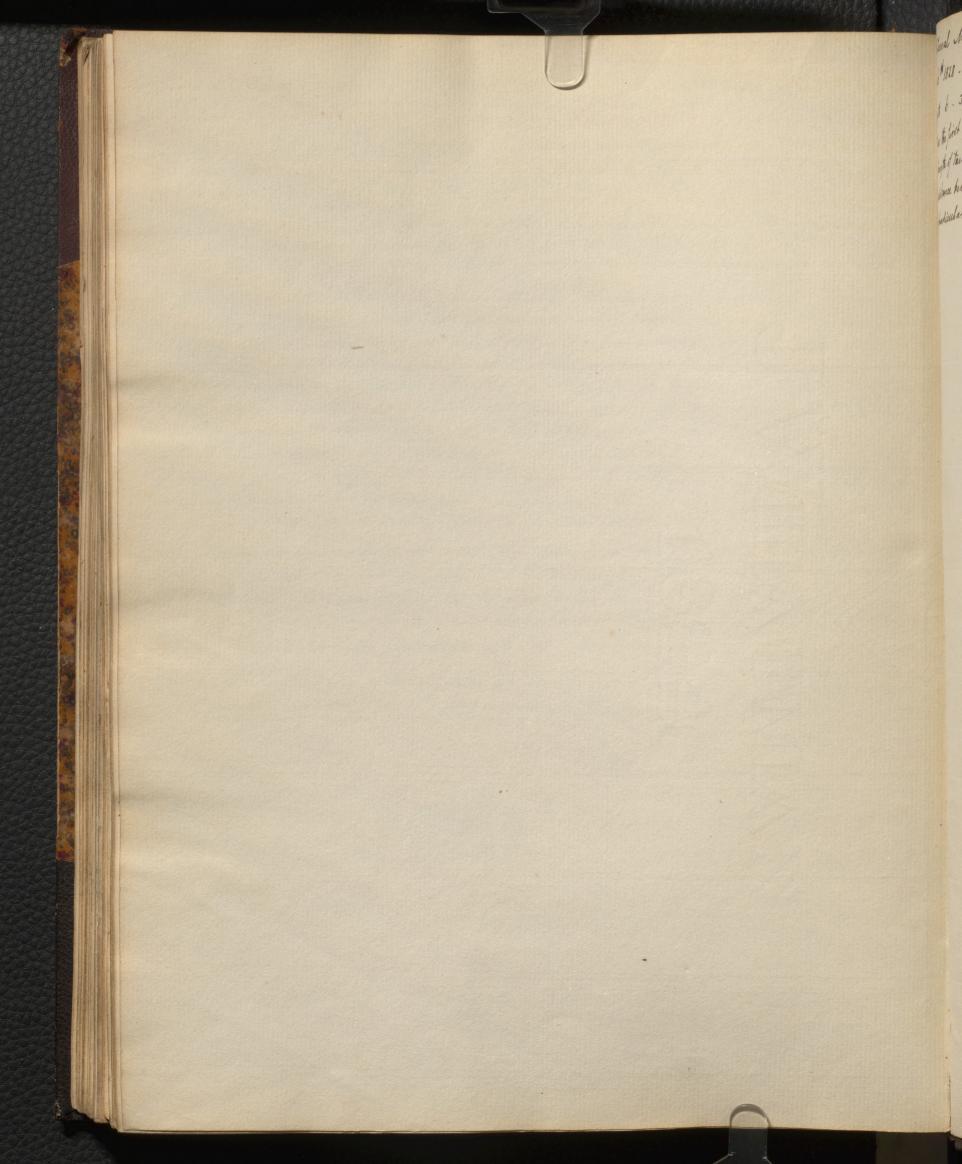
Jo M. 34. Fig 2. Length 3/2 - 1/8 - 1/2 - 9°8 - inches. Bill like a frich nothill close to the feathers. Isides brownish green. Inner wing-coverts yellow with dashes of grey, of outer wing coverts wellow with maller are yellow each of these nearest the lody. I larger black with yellow lifes. Swills have each a featch of yellow on the outer web in their contre. Nump yellow. Tail 12 slightly forked almost even. The two outer yellow. This is formed in Hindoston a Gurharall called tootee or Huldeea Tootee. hailly of five grafs in hunall bushes. Pays four eggs grayish white. I have seen them with the three outer fail-feathers yellow, and only two or three of the inner quills tipped with white. The females & young males, are dirty blackish green where this is black, & dirty greyish greenish yellow where this is yellow; nor are the hies between the colors to well defined, as they seem blending into me another.

Additions to the Descriptions. To Pl. h. Builds of grafs; in trees . lays I eggs hure white These differ much in the intensity & shade of the colors. Some have more or less blue in the green of the back. in some the under parts are wholly, bright greenish yellow. and the dashes of the thighs, & the dides of the body under the wing are more green than dull blue - When young they are all over dull green, darker on upper parts, light asky green on under. I therege has the crides brown . at about 4 months old the inner blue nin of the indes appears . This is shortly after followed by the outer ged nin . and in about Some have the pompedour only on the shoulder of the wing. male & female have voice alike. but latter has no prompadour , & generally the colors not so bright . [I had me which laid 3 eggs . bei a cage by itself.) To M. So. homor webs of tail, black slightly marker with blue. The outer tail feather blackish brown on inner web with a very little blue near the root, white on oreter web. These briss vary - I shot one with no white on the wing where the bluek black strape ends; but with the life of the smaller half of the quills white, a the bastard wing wholly white - That another with white on the outer web ofhere the blue & black ends, only on the 11 th 12 th 13 th 14 th quills. The bast and wring while with dashes of light brown no white at light of quills - that another with the tip of every quill white for about 1/2 an inch on the middle quills . for 1/8 inch on the greater & smaller. no white patch on the outer web of quills where the blue & black ends . but one and the eigner web of the half greater quills at the same place . I small patches of white on a few of the outer quills above that . The white at the end of tail was I wich on outer feather, lefsening to the middle one where it was 3/8 sich. the remaining part of the outer web of outer tail feather. black in the middle . Mate color at root. To the medraun, the inner web of quills eachfut the 3 viener, is blackish, with a white whoh me every one . close to the tip of the imaller , 2 miches from the tip of greater . When the cro-boys find a nest, they let 20 or 30 nooses over it, k on the surrounding branches. as soon as me is caught it schreeches, & brings a flock of them round, when several are caught They make a single schrecch, sometimes repeated. sometimes in pains, sometimes seen in thock Ms. to Pl. 26. The eyewas injured. & the tail worn to a stump . but the outer feather appeared white on outer, grey on inner web: the 200 grey on outer, rufous on inner web. rest like upper tail corests. The time lath Cathers The same

19/10

Varieties of tails to specimens of the Black headed oriole Pl. 22.





Additional Memorandums.

June 6 # 1828 - From this date, for brevity's sake, the Length is noted in this way

"Longth 6 - 3 - 1 - 15 - 2 - with and sometimes a sixth number will be added.

"I there the first number means from point of bill to setting on of tail - the second,

of these the first number means from point of bill to setting on of tail - the second,

the longth of tail - the third, the longth of bill - The fourth the breadth, the fifth

the longth of tail - the third, the longth of bill - The fourth the breadth, the

perfect distance between the end of wring when closed, & the hip of tail - the sixth, the

perfect distance between the end of wring when closed, & the hip of tail - the sixth, the

perfect distance between the end of wring when closed, & the hip of tail - the sixth, the

Total 86 . to be finished at home 9 .

